

NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

**THEATER BALLISTIC MISSILE DEFENSE:
NEW UNITED STATES STRATEGIC REQUIREMENTS
AND THE ABM TREATY**

by

James R. Greenburg

December 1995

Thesis Co-Advisors:

James J. Wirtz
David S. Yost

Approved for public release; distribution is unlimited

DTIC QUALITY INSPECTED 1

19960319 102

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 1995 December	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE Theater Ballistic Missile Defense: New United States Strategic Requirements and the ABM Treaty			5. FUNDING NUMBERS USAF INSS NPS-9	
6. AUTHOR(S) Lt. James R. Greenburg, USN				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Lt. Col. Jeffrey A. Larsen, USAF HQ USAFA/DFE 2354 Fairchild Dr., Suite 4K-25 US Air Force Academy Co Springs, Co 80840			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This thesis examines the continued utility of the Anti-Ballistic Missile (ABM) Treaty for U.S. national security interests and reviews the value of the treaty given the changing post-Cold War environment. The origins of the ABM Treaty are reviewed to put the current ABM Treaty debate in perspective. Other issues examined include the U.S. domestic politics of the ABM Treaty, the impact of the treaty on the strategic defense and nuclear weapons policies of Britain, France and China and the current stakes the United States and Russia may have in the treaty. This thesis concludes that the ABM Treaty remains useful for the national security interests of the United States in the post-Cold War world and should be maintained as currently written. Self-imposed U.S. testing restraints should be unilaterally revised to reflect modern strategic ballistic missile ranges and velocities; the treaty should not be multilateralized and issues of national missile defense (NMD) and TMD should be kept completely separate.				
14. SUBJECT TERMS Theater Ballistic Missile Defense, ABM Treaty of 1972, 1972 and 1987 ABM Treaty Hearings, Russian, Chinese, British, French relations with the United States, U.S.-Russian Deterrence, THAAD, Navy Upper Tier, Boost Phase Intercept, MEADS, PAC-3			15. NUMBER OF PAGES 164	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UL	

Approved for public release; distribution is unlimited.

**THEATER BALLISTIC MISSILE DEFENSE:
NEW UNITED STATES STRATEGIC REQUIREMENTS
AND THE ABM TREATY**

James Regan Greenburg
Lieutenant, United States Navy
B.A., University of South Carolina, 1987

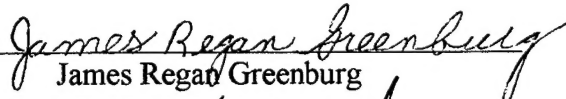
Submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

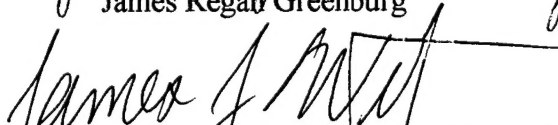
from the

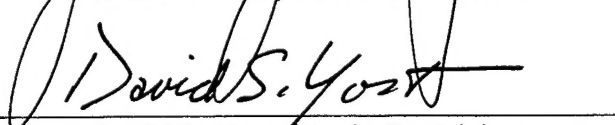
**NAVAL POSTGRADUATE SCHOOL
December 1995**

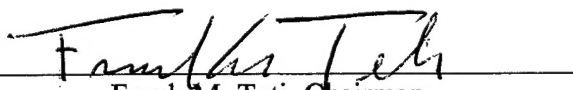
Author:


James Regan Greenburg

Approved by:


James J. Wirtz, Thesis Co-Advisor


David S. Yost, Thesis Co-Advisor


Frank M. Teti, Chairman,
Department of National Security Affairs

ABSTRACT

This thesis examines the continued utility of the Anti-Ballistic Missile (ABM) Treaty for U.S. national security interests. The President has identified the proliferation of theater ballistic missiles (TBM) as a threat to U.S. national security. However, in the view of some observers, the theater missile defense (TMD) systems the United States is developing may violate the ABM Treaty - a treaty that the Clinton administration is committed to maintaining.

This study reviews the value of the ABM Treaty to U.S. national security interests, in view of evolving post-Cold War circumstances. The origins of the ABM Treaty are reviewed to put the current ABM Treaty debate in perspective and to advance understanding of why the United States and the Soviet Union were able to reach agreement in negotiating the treaty, despite their dissimilar goals. Other issues examined include the U.S. domestic politics of the ABM Treaty from its inception to the present day and the impact of the ABM Treaty on the strategic defense and nuclear weapons policies of Britain, France and China (the other three recognized nuclear powers not party to the treaty), and the current stakes the United States and Russia may have in the treaty in building post-Cold War cooperation.

This thesis concludes that the ABM Treaty remains useful for the national security interests of the United States in the post-Cold War world and should be maintained as currently written. However, self-imposed U.S. testing constraints - delineated by the 1972 "Foster Box" - should be unilaterally revised, to reflect modern strategic ballistic missile ranges and velocities and to establish that projected U.S. TMD deployments are consistent with the ABM Treaty. Additionally, the treaty should not be multilateralized and issues of national missile defense (NMD) and TMD should be kept completely separate, given that NMD is regulated by the ABM Treaty while TMD is not.

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
	A. BACKGROUND.....	2
	1. The "Foster Box".....	3
	2. The Current U.S. TMD Program.....	5
	a. PAC-3.....	5
	b. Navy Area Defense System.....	5
	c. THAAD.....	6
	d. Navy Upper Tier.....	7
	e. BPI.....	7
	f. MEADS.....	7
	3. The U.S. ABM Treaty Clarification Proposal.....	8
	a. U.S. Domestic Response.....	9
	b. The Russian Response.....	9
	c. Senate Reservations and Opposition.....	10
	B. METHODOLOGY AND ORGANIZATION.....	11
II.	THE ORIGINS OF THE ABM TREATY.....	15
	A. U.S. AND SOVIET STRATEGIC COMPETITION: COMMON CROSSROADS..	16
	B. U.S. AND SOVIET GOALS IN NEGOTIATING SALT I.....	27
	C. THE IMPACT OF MIRVs ON THE SALT I NEGOTIATIONS.....	28
	D. THE ABM TREATY CONCLUDED.....	31

III.	THE DOMESTIC POLITICS OF THE ABM TREATY.....	36
A.	THE ABM TREATY RATIFICATION DEBATE.....	37
B.	THE ABM TREATY AND THE SDI DEBATE.....	43
1.	Agreed Statement D "Narrow" vs "Broad" Interpretation.....	47
2.	MAD and Soviet Strategic Doctrine.....	48
3.	The ABM Treaty and Strategic Arms Control.....	49
4.	Senate Hearings on the ABM Treaty and the Constitution.....	50
5.	The Jay Treaty and the SDI Debate.....	52
C.	THE MISSILE DEFENSE ACT OF 1991 AND THE CURRENT TMD DEBATE....	53
D.	THE NATIONAL SECURITY UTILITY OF THE ABM TREATY.....	58
IV	THE INTERNATIONAL SIGNIFICANCE OF THE ABM TREATY.....	62
A.	BRITISH POST-COLD WAR STAKES IN THE ABM TREATY.....	63
1.	British Post-Cold War Security Interests and Perceived Threats to those Interests..	64
2.	The Role of the Nuclear Deterrent In Supporting British Security Interests.....	65
3.	British View of the ABM Treaty in the Post-Cold War World.....	66
4.	Current British Policy on TMD.....	68
B.	FRENCH POST-COLD WAR STAKES IN THE ABM TREATY.....	71
1.	French Concerns Over SDI.....	72
2.	France's View of its Role in the World.....	74
3.	French Apprehension About Space-Based ABM Systems.....	75
4.	French Post-Cold War Security Interests.....	77
a.	Deterrence as a Hedge Against a Resurgent Russia.....	77

b. Deterrence of Emerging Threats.....	78
c. Deterrence of the Proliferation of WMD.....	79
5. The Opportunity for U.S.-French Cooperation Based on Mutual Interests.....	81
C. CHINESE POST-COLD WAR STAKES IN THE ABM TREATY.....	82
1. Chinese Economic Growth.....	83
2. Growth in Chinese Military Capability.....	83
3. Chinese Nationalism and Extra-Territorial Claims.....	85
a. Chinese Intentions in Central Asia.....	84
b. Chinese Intentions in the South China Sea.....	86
c. Chinese Motivations for Extra-Territorial Claims.....	87
4. Possible Chinese Security Interests vs U.S. Security Interests in the East Asia-Pacific Region.....	88
5. Possible Chinese Security Strategy for the East Asia-Pacific Region.....	89
a. "Smile Diplomacy".....	89
b. "Challenge and Probe" of the Regional Status Quo.....	91
c. Adherence to a "Double Standard" in International Relations.....	93
1. Nuclear Testing.....	94
2. Arms Control.....	96
3. Military Spending.....	97
6. Potential Chinese "Use" of the ABM Treaty.....	99
V. U.S. AND RUSSIAN POST-COLD WAR STAKES IN THE ABM TREATY.....	104
A. THE MEANING OF THE ABM TREATY IN 1995.....	110
B. DETERRENCE.....	112

1. U.S.-Russian Bi-lateral Strategic Deterrence.....	114
2. U.S.-Russian Deterrence of “Rogue,” Unpredictable or Irrational Actors.....	118
C. STRATEGIC BALANCING.....	121
D. NONPROLIFERATION.....	124
VI. CONCLUSION.....	127
A. THE ABM TREATY AND THE U.S.-RUSSIAN POST-COLD WAR DIALOGUE.....	127
B. THE ABM TREATY AND POST-COLD WAR STRATEGIC STABILITY.....	129
1. Britain and France.....	129
2. China.....	131
C. THE COMPATIBILITY OF THE ABM TREATY AND THEATER MISSILE DEFENSE.....	132
D. RECOMMENDATIONS.....	135
1. Maintain the ABM Treaty as it is Currently Written.....	135
2. Do Not Multilateralize the ABM Treaty.....	135
3. Revise the “Foster Box”.....	135
BIBLIOGRAPHY.....	137
INITIAL DISTRIBUTION LIST.....	149

EXECUTIVE SUMMARY

This thesis examines the continued utility of the Anti-Ballistic Missile (ABM) Treaty for U.S. national security interests. In evaluating the national security utility of the ABM Treaty, we must analyze the nation's interests, given the end of the bi-polar Cold War world, and determine how the nation can best secure those interests for its future security. The President has identified the proliferation of theater ballistic missiles (TBM) as a threat to U.S. national security. However, in the view of some observers, the theater missile defense (TMD) systems the administration is developing may violate the ABM Treaty - a treaty that the Clinton administration is committed to maintaining.

This thesis addresses this dilemma in six chapters. Chapter II discusses the origins of the ABM Treaty. It examines the impact of U.S. and Soviet nuclear deterrent strategies, national goals, and strategic nuclear delivery system development on the ABM Treaty negotiations. It also addresses the Nixon administration's desire to use the SALT process as the centerpiece of a broader strategy of detente (a lessening of tensions) with the Soviet Union. This chapter suggests how the United States and the Soviet Union were able to reach agreement in negotiating the treaty, despite their dissimilar goals.

Chapter III discusses the domestic politics of the ABM Treaty, from the ratification hearings in 1972 to the present TMD debate. This chapter also attempts to put into perspective the domestic considerations that influenced the formulation of the treaty, its ratification and interpretation. The 1972 ratification hearings, the Strategic Defense Initiative (SDI) debate of the 1980s, the debate over the interpretation of Agreed Statement D, and U.S. and Soviet strategic nuclear policies are discussed.

Chapter IV discusses how the ABM Treaty has shaped the strategic defense and nuclear weapons policies of Britain, France and China since 1972. Using the concept of a stake-holder's analysis, the current policies - both explicit and implicit - of these three nuclear powers are reviewed. The stakes that these countries currently have in the ABM Treaty are analyzed in terms of the impact that changes to the treaty might have on their national security interests.

Chapter V discusses the current stakes that the United States and Russia may have in the ABM Treaty. The significance of the emergence of a multi-polar world and the role of the ABM Treaty in maintaining strategic stability are examined in terms of strategic and regional deterrence,

the proliferation of weapons of mass destruction (WMD) and possible U.S.-Russian cooperation in dealing with threats to shared interests.

Chapter VI concludes that the ABM Treaty remains useful to the national security interests of the United States in the post-Cold War world. The thesis recommends that the treaty, as currently written, be maintained as an element of a post-Cold War U.S.-Russian strategic stability regime. The treaty should not be multilateralized. All current U.S. TMD programs can be pursued based on testing guidelines established unilaterally by a revised "Foster Box" to reflect the capabilities of modern strategic ballistic missiles possessed by the United States and Russia. (The "Foster Box" was a delineation of treaty-compliant capabilities outlined to the Senate in 1972 during the ABM Treaty ratification hearings. It was and remains a unilateral U.S. interpretation and could be revised on a unilateral basis, so long as any revision reflects the treaty language.)

The current debate surrounding the ABM Treaty's utility for national security is polarized based on Cold War paradigms. Treaty supporters believe that ballistic missile defenses could reignite a U.S.-Russian arms race and thus endanger current strategic arms agreements. Treaty opponents argue that it is imprudent to leave one's population undefended against ballistic missile attack and that, with the end of the Cold War, the treaty has lost any relevance it may have had. As a consequence of the Cold War orientation of this polarized debate, the ABM Treaty debate is often diverted to issues of national missile defense (NMD), which is regulated by the treaty, instead of being focused on theater missile defense (TMD), which is not regulated. As a result, this debate often does not adequately address the current policy issues that bear on U.S. national security and the ABM Treaty's connection or potential connection to those security issues.

This study concludes that TMD and the ABM Treaty are compatible. The ABM Treaty has played a role not only in the relationship between the two parties but also in the parties' relationships with the rest of the world. The continued vitality of the ABM Treaty can play a role in post-Cold War strategic stability in general and in building a new political relationship between the United States and Russia in particular. Effective TMD can contribute to this stability by enabling both the United States and Russia to defend their interests against emerging TBM threats posed by "rogue" actors while posing no threat to the integrity of their ICBM and SLBM deterrent forces.

The ABM Treaty does not need to be changed with respect to current TMD systems. To prevent further confusion on this point, issues of NMD and TMD must be kept completely separate in all respects because they are different issues with regard to the ABM Treaty: one is regulated by the treaty while the other is not.

I. INTRODUCTION

Iraqi use of theater ballistic missiles (TBMs) during the 1990-1991 Gulf war focused the U.S. defense establishment on the danger posed by the widespread proliferation of TBMs. This technology poses a serious threat to U.S. national security interests because it gives potential aggressors a potent capability to deliver short notice or surprise attacks against U.S. allies, U.S. forces deployed overseas and (potentially) U.S. territory. Secretary of Defense Les Aspin, in the Bottom-Up Review (BUR) of October 1993, characterized this problem as follows:

...a different threat of particular concern in the post-Cold War period is the proliferation of shorter range ballistic and cruise missiles armed with nuclear, biological or chemical warheads. Ballistic and cruise missile deployments are expected to increase world-wide, despite stepped-up efforts to inhibit their proliferation, and several countries other than the acknowledged nuclear states are developing both nuclear weapons and ballistic missiles. (Aspin: Bottom-Up Review 1993, 44)

Amplifying his statement in the BUR, Aspin noted in his Annual Report to the President and the Congress of January 1994 that "Today, more than 15 nations have ballistic missiles. By the year 2000, perhaps 20 nations may have them." (Aspin: Annual Report to the President and the Congress 1994, 51) Arguably, of the 15 nations that Aspin estimated possessed the type ballistic missiles cited as a threat in the BUR, nearly half -- Libya, Iraq, Iran, Pakistan, North Korea, China and Syria -- could be potential U.S. adversaries.

This thesis assumes that the continuing proliferation of ballistic missiles and weapons of mass destruction (WMD) makes TMD increasingly important to the United States. Supporters of the restrictive or "traditional" interpretation of the ABM Treaty caution that in developing these TMD systems, it is vital that the integrity of the ABM Treaty be maintained because it is the "cornerstone" of the current strategic arms control regime. Those who oppose this viewpoint and advocate the testing, development and deployment of TMD systems believe that with the end of the Cold War, a new world has begun. Considerations and mechanisms that applied during the Cold War no longer apply and the United States must take the necessary steps to defend its interests. These TMD supporters assert that if effective TMD systems are not developed and deployed that "U.S. strategic

freedom of action will be severely constrained in the coming years, putting the nation and its interests at increasing risk.” (Cambone 1994, 6)

The TBM threat might highlight the necessity for the United States to develop effective TMD systems. However, in the view of some, the provisions of the 1972 ABM Treaty between the United States and the Soviet Union prevents the United States from legally doing so. This poses a dilemma for U.S. policy-makers: should the U.S. government build defensive systems - that may violate the ABM Treaty - to meet what has been evaluated as an emerging TBM threat or should it not build defensive systems in order to remain compliant with the “traditional” interpretation of the ABM Treaty? In order to make this determination, an even more fundamental question must be asked: “Is the ABM Treaty useful to U.S. national security interests in the post-Cold War world?”

A. BACKGROUND

Since taking office in January 1993, the Clinton administration has redirected the Ballistic missile Defense Organization (BMDO, formerly the Strategic Defense Initiative Organization (SDIO), away from a national missile defense system, advocated by the Reagan and Bush administration, toward the development of TMD systems to protect forward deployed U.S. expeditionary forces and allies. (Mosher and Hall 1994, 2) President Clinton’s TMD program, like his predecessors’ SDI program, however, raises several questions about compliance with the ABM Treaty of 1972.

The accepted interpretation of the ABM Treaty is restrictive with respect to strategic missile defenses. It permits each side to maintain one fixed land-based Abm site as stipulated in the Treaty Protocol of 1974 and a certain agreed number of fixed land-based ABM test ranges as set forth in Article IV of the treaty. Additionally, Article V prohibits the development, testing and deployment of sea, air, space or mobile land-based ABM systems; and Article VI prohibits non-ABM systems from being modified in such a manner that they could have a capability against strategic ballistic missiles or could be tested in an “ABM mode.”

Although the ABM Treaty did not formally establish an agreed differentiation between strategic ballistic missiles (SBM) and tactical (theater) ballistic missiles (TBM), SBMs were generally agreed by the negotiators to be missiles captured by other strategic nuclear arms control agreements.

Ambassador Sidney Graybeal, the Alternate Executive Officer of the U.S. Strategic Arms Limitation Talks (SALT) I delegation and the first U.S. Commissioner of the Standing Consultative Commission (SCC) recently noted that:

In 1972, strategic ballistic missiles, in the context of the ABM Treaty, were those limited by the Interim Agreement, which included the SS-N-6, a 3,000km range missile with a maximum velocity close to 5km/sec. In SALT II, the SS-N-6 was also labeled a strategic ballistic missile." (Graybeal and McFate 1994, 236)

According to Steven Hildreth, a researchert in the Foreign Affairs and National Defense Division of the Congressional Research Service, "Shorter rnage TBMs, whose ranges vary considerably from 30 to 3,000 kilometers, were not captured by the ABM Treaty or U.S.-Soviet strategic nuclear arms control agreements." (Hildreth 1994, 1) Even some supporters of the ABM Treaty agree that the treaty did not inhibit development, testing or deployment of tactical (theater) missile defense systems except for the provision not to test non-ABM defensive systems "in an ABM mode" and not to give them "capabilities" to counter strategic ballistic missiles or their elements, such as reentry vehicles (RVS). (Mendelsohn and Rhineland 1994, 8)

1. The "Foster Box"

To clarify what "tested in an ABM mode" means, during the Senate ratification hearings in the summer of 1972, the "shared understanding" between the Senate and the executive branch, as presented by Dr. John S. Foster, Jr., the Director of Defense Research and Engineering, was that a target vehicle with a maximum velocity over 2 kilometers per second, or a maximum altitude over 40 kilometers would have the flight characteristics of a SBM. Any launcher, missile or radar tested against a missile capable of operating within such parameters would be considered "tested in an ABM mode." (Mendelsohn and Rhineland 1994, 9)

It was made clear to the Senate at this time that the "Foster Box" was internal Department of Defense (DOD) guidance and was not a dividing line between strategic and tactical ballistic missiles that had been agreed with the Soviets. Indeed, the Senate was told that it had never even been officially discussed with the Soviets. (Graybeal and McFate 1994, 19)

According to Ambassador Graybeal, the altitude and speed parameters described by Foster were chosen as DOD guidance for explicit reasons. The altitude of forty kilometers was picked as a benchmark delineating the reasonable atmosphere. The purpose here was to be able to challenge Soviet air defense systems that may have an ABM capability. For instance, if an operational firing of an SA-10 was conducted by the Soviets and it was observed by national technical means (NTM) - the only compliance verification means stipulated in the ABM Treaty - to exceed an altitude of forty kilometers, then the United States would have grounds to challenge the treaty-compliance of that system in the SCC.

The speed of 2km/sec was chosen as a benchmark for the United States to observe in the development of its Surface-to-Air Missile D (SAM-D) which today is known as Patriot. The SAM-D was designed as a dual capable - anti-aircraft and anti-missile - system. To ensure its compliance with the ABM Treaty, the velocity of 2km/sec was selected as the maximum speed of any target against which it would be tested. (Telephone interview with former U.S. official, 18 July 1995) Additionally, it was also agreed with the Senate that any test that would exceed the parameters of the "Foster Box" would be reviewed by a DOD treaty compliance review board for further evaluation to determine if the test in question was compliant with the ABM Treaty.

Although there is nothing legally binding about the parameters of the "Foster Box," they were accepted by the Senate as part of their understanding of U.S. policy regarding the restrictions imposed by the ABM Treaty and have been referred to ever since as the "Foster Box." (Mendelsohn and Rhinelanders 1994, 9) Additionally, ABM Treaty supporters have apparently construed the "Foster Box" to be actual treaty-imposed limitations on ABM related testing rather than as a "caution light" that the United States to use to gauge U.S. and Soviet treaty-compliance. By implication then, tests against targets traveling below the speed and altitude specified by the "Foster Box" would be "unquestionably" compliant with the treaty. Some observers - who support the ABM Treaty over TMD - believe that of the six TMD systems in R&D or testing programs at present (discussed below), three have the inherent capability to exceed the limits of the "Foster Box" presented to the Senate in 1972 and thus raise the issue of ABM Treaty compliance, at least in the eyes of those who argue that the "traditional limitations (self-imposed by the United States in this case) should be upheld.

Those who oppose this viewpoint might do so on two grounds. First, they might argue that the ABM Treaty in no way restricts TMD systems. As long as such a system does not demonstrate a capability "to counter strategic ballistic missiles or their elements in flight trajectory" by being "tested in an ABM mode" as verified by NTM, then that system is not in violation of the ABM Treaty. Secondly, they might argue that the very terms of the "Foster Box" present not only an inconsistency in the treaty but also a flaw in logic: the treaty cannot impose restrictions that were never officially discussed with the Soviets and that were not agreed to by the Soviets during the negotiations. This fundamental observation is at the heart of the debate over the meaning of Agreed Statement D of the treaty. It is discussed in depth in Chapter III.

2. The Current U.S. TMD Program

Currently, the U.S. TMD program consists of two basic "packages" of weapons systems: a "core" or nearer-term systems package and an "advanced" or longer-term systems package. The "core" package includes the Patriot Advanced Capability-3 (PAC-3) air defense system, the Navy Standard Missile II (SM-2) Block IVA (Area Defense, formerly Navy Lower Tier) and the Theater High Altitude Area Defense (THAAD) system. (O'Neill 1995, 12) All three of these systems are terminal defenses, meaning that their intercept opportunities are limited to the target's descent phase. Of the three "core" systems, PAC-3 and Navy Area Defense are point or lower tier defense systems designed to protect small areas such as airfields, ports of debarkation, coastal cities, command and control facilities or expeditionary forces ashore and are within the accepted "restrictive" interpretation limits of the ABM Treaty. Essentially, these two programs represent cost and operationally effective upgrades of existing air defense systems and quickly give them effective TMD capabilities.

a. PAC-3

The PAC-3 has an estimated range of 50-100km and an interceptor velocity of approximately 2km/sec. It improves point defense capability against TBM threats by incorporating a kinetic-kill extended range interceptor (ERINT) warhead as well as improved radar, communication and discrimination systems. (O'Neill 1995, 13)

b. Navy Area Defense System

The Navy Area Defense System has an estimated range of 150km and an interceptor velocity of approximately 2km/sec. It takes advantage of the mobility of naval platforms to locate

TMD “sensors and launchers closer to an aggressor’s launch point. Thus, a naval TMD capability can be in place within a region of conflict to provide TMD protection for land-based assets before hostilities erupt or before land-based defenses could be transported to the theater.” (O’Neill 1995, 13)

c. THAAD

Of the three “core” package TMD systems, only THAAD “will be capable of engaging the full spectrum of ballistic missile threats.” (O’Neill 1995, 14) The THAAD system provides a unique capability for wide area defense against TBMs at higher altitudes and longer ranges. PAC-3 and Navy Area Defense do not possess this capability. THAAD will be able to “destroy weapons of mass destruction higher up and further out than either PAC-3 or the Navy Area Defense systems.” (O’Neill 1995, 14) by using THAAD as an upper-tier defense and PAC-3 and/or Navy Area Defense as lower-tier defenses, the number of intercept opportunities can be increased, improving the overall effectiveness of a TMD shield.

Some observers argue that “THAAD runs afoul of the ABM Treaty’s Article V prohibitions against mobile, land-based weapons that can destroy strategic ballistic missiles.” (Pike and Corbin 1995, 5) They base this conclusion on the results of computer simulation, (Graybeal and McFate 1995, 3) they believe shows THAAD - though designed as the upper-tier defense for the “core” package and intended to defend an area a few hundred kilometers in diameter against missiles with ranges of up to 600 kilometers - might be capable of engaging a SBM as defined by the parameters of the “Foster Box,” raising ABM Treaty compliance questions. (Mosher and Hall 1994, 16)

The “advanced” package of TMD systems being developed includes the navy Theater Wide Defense System (Navy Upper-Tier), the Boost-Phase Intercept (BPI) System and the Medium Extended Air Defense System (MEADS) - formerly Corps SAM. General Malcolm R. O’Neill, the Director of the BMDO, has stated that:

These three systems are currently in the concept exploration phase and a decision to proceed with further development will be based on a rigorous acquisition decision process based on national priorities, current and projected threat developments, technical maturity, system effectiveness, lethality, operational need, international cooperation, and affordability. (O’Neill 1995, 17)

Of the three "advanced" package systems, Navy Upper-Tier and the BPI system have the capability to intercept ballistic missiles during the ascent phase as well as the terminal or descent phase of their flights, which raises questions about compliance with the "traditional" interpretation of the ABM Treaty.

d. Navy Upper-Tier

The Navy Upper-Tier system consists of the upgraded Aegis radar and a kinetic-kill missile warhead known as the light exoatmospheric projectile (LEAP) that enables the system to destroy targets outside of the earth's atmosphere at distances up to 3500km. (Mosher and Hall 1994, 16) According to General O'Neill, because of this capability, "The Navy Theater-wide system which could be among the first deployed TBMD systems in a regional crisis, could provide extensive areas of protection." (O'Neill 1995, 17)

e. BPI

The BPI system also employs a kinetic-kill warhead. The warhead will be launched from a high performance tactical aircraft such as the Air Force F-15E Strike Eagle and the Navy F-14 Tomcat that would be patrolling in the general locations of TBM launch sites. Once a launch is detected, the interceptor would engage the target missile while still in its boost phase.

Based on the reasoning that ballistic missiles, regardless of their range, are best targeted and countered during their boost phase, this system is intended to destroy enemy ballistic missiles in their boost phase over enemy territory. In this manner, debris from the engagement and the lethal payload will fall back on the aggressor. O'Neill notes this "...would be particularly effective against advanced delivery system countermeasures and missiles carrying weapons of mass destruction." (O'Neill 1995, 19) Additionally, O'Neill notes in his Congressional Testimony that:

It is important to recall that our fighter pilots witnessed boosting SCUD missiles during the Gulf War. A BPI capability would allow us to leverage our tremendous tactical air capabilities. (O'Neill 1995, 20)

f. MEADS

The third "advanced" package system, the MEADS, provides limited area defense of maneuver forces against the TBM threat and also against a future envisioned threat that may be posed

by proliferated cruise missile technology. Additionally, MEADS is designed to decrease U.S. strategic lift requirements for TMD systems and will have the capability to be employed "either in combination with other systems as part of integrated air defense, or individually, in stand alone operations." (O'Neill 1995, 19)

3. The U.S. ABM Treaty Clarification Proposal

The United States finds itself in a dilemma. On the one hand, the president and the secretary of defense have identified TBMs as being a major threat to U.S. national security interests. (Perry: Annual Report to the President and the Congress 1995, 239) On the other hand, the United States is party to a treaty that, in the eyes of its supporters, not only restricts its ability to develop, test and deploy the weapons that the executive believes are necessary to defend against the TBM threat but also has been "the cornerstone of U.S. nuclear deterrent strategy and strategic arms control policy since 1972." (Mendelsohn and Rhinelanders 1994, 8)

The Clinton administration appears interested in defining policies, with respect to the ABM Treaty, on terms most favorable to U.S. defense and strategic interests: policies that permit the development and deployment of TMD systems necessary to counter the TBM threat identified in the BUR and in the 1994 and 1995 Secretary of Defense's Annual Report to the President and the Congress but that are also consistent with the SCC interpretations of the ABM Treaty. The administration argues that it may be able to preserve the integrity of the ABM Treaty and reaffirm the treaty's importance to long-term U.S. goals of limiting nuclear weapons proliferation and enhancing strategic stability. The ABM Treaty is seen as necessary to secure Russian compliance with the START I and START II treaties and possible follow-on agreements. Whether and to what extent these goals can be reconciled remains to be seen.

To accommodate the development and deployment of TMD systems that might otherwise violate the current "traditional" interpretation of the ABM Treaty, the Clinton administration has presented a proposal through the SCC for an "agreed understanding" with Russia that would permit such development and deployment. According to published reports, the U.S. proposed a "clarifying division mark between the two types of [theater and strategic] defenses as the tested ability to intercept an incoming missile traveling at [a peak velocity of] 5km/sec." (Inside the Pentagon 3 March 1994, 4) The velocity of 5km/sec was arrived at because it corresponds to a ballistic missile

with a maximum range of approximately 3500km - the longest range TBM threat that the United States foresees. (Hildreth 1994, 9) This U.S. proposal makes no mention of or reference to target altitude or interceptor speed limitations.

a. U.S. Domestic Response

In the opinion of its critics, this proposal alters the previous U.S. understanding of "tested in an ABM mode" in a manner that changes that parameters of the "Foster Box" by removing any limitation on the altitude at which a target missile may be engaged and permitting TMD system engagement of target ballistic missiles with speeds up to and including 5km/sec vice 2km/sec. Additionally, critics argue that it alters the understanding of Article VI of the ABM Treaty in a manner that would permit TMD systems that might be capable of intercepting a strategic ballistic missile, to be deployed as long as their full range of capabilities had not been demonstrated. In the view of the treaty's supporters, this proposal alters the interpretation of the treaty from that presented to the Senate for ratification in 1972. If it were adopted as an 'agreed understanding' to the treaty to allow the development and deployment of TMD systems capable of intercepting a strategic ballistic missile, the ABM Treaty could be undermined. ABM Treaty supporters believe that this would pose a threat to the current arms control regime and the national security interests of the United States. (Mendelsohn and Rhinelanders 1994, 8)

b. The Russian Response

The Russian response to the U.S. proposal in the SCC has been drawn out and complicated. They have agreed with the United States that the longest range TMD threat is in the 3500km range category. (O'Neill 1995, 26) They have agreed with the United States in defining a strategic ballistic missile as one with a re-entry speed greater than 5km/sec and a range greater than 3500km. (Inside the Pentagon 3 March 1994, 4) They also offered, however, a "list of suggestions" in response that included limiting the maximum speed of TMD interceptors to 3km/sec. The 3km/sec interceptor speed limit, if accepted by the United States, would allow deployment of all "core" package TMD systems; but it would "rule out advanced versions of THAAD and other future missile defense options the Pentagon is now contemplating," including Navy Upper-Tier.

c. Senate Reservations and Opposition

Advocates of a robust TMD program cite a growing awareness that “the [Clinton administration] proposed ABM Treaty changes might produce a new arms control regime, one that places limits on TMD systems within the context of the ABM Treaty. (Senate Republican letter to the full Senate concerning ABM Treaty clarification negotiations dated 31 March 1995) Senator Richard Lugar stated that:

If the proposed changes restrict U.S. defense programs, or could tend to have that effect, they must be judged to substantive modifications and must be submitted to the Senate for its advice and consent. (Hildreth 1994, 17)

Senator Lugar’s comments reflect a dilemma within the Senate. Most Senators support the development of effective TMD systems yet at the same time the Senate wants to preserve its prerogatives with respect to the treaty-making process by insisting that it must approve any change - proposed by the executive - in interpretation of the treaty that might permit development and deployment of those systems. (Interview with Senate Staffer, 14 February 1995)

In the Spring of 1994, the Clinton Administration was reportedly contemplating accepting the Russian 3km/sec interceptor speed limit with the caveat that this limit would only apply to land-based systems, thus leaving open the option to develop more advanced sea and air-launched systems. (Inside the Pentagon 12 May 1994, 14) This Russian proposal was not accepted by the United States due in large part to widespread congressional and senate opposition. In a letter to the President, dated March 25, 1994 from Senate Republicans, the concern was expressed that if the Russian proposal was accepted “the U.S. would assume new legal obligations under the ABM Treaty - constraints that were not envisioned or intended when the treaty was ratified.” (Senate Republican letter to President Clinton, concerning TMD demarcation negotiations, of 25 March 1994) Senior Democratic senators also expressed their opposition to the administration’s SCC proposals at a March 10, 1994 Foreign Relations Committee hearing. Their opposition, for the most part, is based on their belief that the proposal weakens the ABM Treaty. During this meeting, several senior democratic senators, John Kerry (D. Mass) among them, “questioned the wisdom of trying to make any changes to the treaty.” (Lockwood 1994, 19) Thus, for different reasons, both parties in congress have asserted that the

senate must give its advice and consent to nay changes made to the ABM Treaty - either written or interpretative - in the TMD clarification negotiations. (Senate Republican letter to President Clinton concerning ABM Treaty clarification negotiations of 17 January 1995/Lockwood, "Senators Hear Testimony against Changes to the ABM Treaty" 1994, 30) Those senators who support TMD development despite the ABM Treaty, want to give advice and consent on any clarification agreement because they do not want U.S. programs curtailed by more specific and stringent treaty provisions. Those senators who support the ABM Treaty want to give their advice and consent to any clarification agreement because they do not want the ABM Treaty weakened or made irrelevant.

Largely as a result of the U.S. refusal to accept the Russian proposal on interceptor speed limits, the SCC negotiations on clarifying the treaty deadlocked. (Gertz 1994, A14) At the May 1995 Clinton-Yeltsin Summit, the two leaders issued a joint statement concerning TMD. Some observers believe that the purpose of the statement was to extract both countries from the stalled negotiations by affirming both U.S. and Russian commitments to the continued observance of the ABM Treaty and affirming the need for TMD to meet emerging post-Cold War threats. (Interviews in Washington, D.C. 12 June 1995)

In contrast to those who support the ABM Treaty, supporters of TMD - most of whom are critics of the ABM Treaty - contend that the ABM Treaty is already irrelevant because it was a product of the Cold War and the Cold War has ended giving way to a multi-polar world, elements of which pose a serious TBM threat to the United States. Many in the pro-TMD camp advocate abrogation of the ABM Treaty because, in their view, it stands in the way of the United States defending itself and its interests in a dangerous world. (Interviews in Washington, D.C., 14 June 1995)

Whether and to what extent the ABM Treaty is relevant in the post-Cold War world will largely determine the "correctness" of these opposing views. Analyzing the current relevance of the ABM Treaty to U.S. national security interests vis-a-vis TMD is the purpose of this thesis.

B. METHODOLOGY AND ORGANIZATION

This thesis examines the ABM Treaty in terms of four areas: the origins of the ABM Treaty; the domestic politics of the ABM Treaty; British, French and Chinese stakes in the ABM Treaty; and

American and Russian stakes in the ABM Treaty in the post-Cold War world. In order to make the determination of whether the ABM Treaty continues to hold utility for the national security interests of the United States, the findings related to each of these four areas are evaluated against three criteria using the following method: if at least one of the criteria are met by the findings for each area with all three criteria being met collectively by the findings of the four areas together, then it can be concluded that the ABM Treaty is still useful to U.S. national security interests. If any of the four areas does not meet one of the three criteria or if all three criteria are not met collectively by the findings of the four areas, then it can be concluded that the ABM Treaty is not still useful to U.S. national security interests.

There are four options for the ABM Treaty. The first is continued adherence to the ABM Treaty as it is currently written with a unilateral revision of the parameters delineated by the "Foster Box" to reflect the ranges and velocities of modern strategic ballistic missiles. The second is to amend the treaty under Article XIV provisions, incorporating specific definitions delineating the difference between strategic and theater ballistic missiles and the characteristics of specific systems authorized to counter TBMs. The third option is to negotiate a new "agreed understanding" with the Russians that would "clarify" the ABM Treaty in a manner that would permit the deployment of effective TMD systems. Option four is to withdraw from the ABM Treaty under Article XV, paragraph 2, provisions based on a decision by U.S. leadership that "extraordinary events related to the subject matter of this treaty" jeopardize the "supreme interests" of the United States. In withdrawing, Washington might cite the danger to U.S. interests posed by the proliferation of TBM technology.

Chapter II discusses the origins of the ABM Treaty. It examines the impact of U.S. and Soviet nuclear deterrent strategies, national goals and advanced nuclear delivery system development on the ABM Treaty negotiations. This chapter suggests how the United States and the Soviet Union were able to reach agreement in negotiating the treaty, despite their dissimilar goals. It appears that the Soviets recognized the U.S. eagerness to conclude an ABM Treaty as an opportunity worth grasping, "because the consequences might approximate the ones preferred by the Soviet Union." (Yost 1988, 93) At the time, the treaty represented a "win-win" situation for both the United States and the Soviet Union.

Chapter III discusses the domestic politics of the ABM Treaty from its ratification hearings to the present TMD debate. This chapter attempts to put into perspective the domestic considerations that influenced the formulation of the treaty, its ratification and interpretation. The 1972 ratification hearings, the SDI debate of the 1980s, the debate over the interpretation of Agreed Statement D and U.S. and Soviet strategic nuclear polities are discussed.

Chapter IV discusses why the ABM Treaty shaped the strategic defense and nuclear weapons policies of Britain, France and China since 1972. Using the concept of a stake-holder's analysis, the current policies - both explicit and implicit - of these three nuclear powers are reviewed. The stakes that these countries currently have in the ABM Treaty are analyzed in terms of the impact of changes to the treaty on their national security interests as major nuclear powers.

Chapter V discusses the current stakes that the United States and Russia might have in the ABM Treaty. The significance of the emergence of a multi-polar world and the role of the ABM Treaty in maintaining strategic stability in that world are examined in terms of strategic and regional deterrence, proliferation of WMD and world strategic balancing by the United States and Russia.

Chapter VI summarizes the findings of the previous four chapters. Additionally, these findings are evaluated against three criteria. First, did the findings indicate that the ABM Treaty contributes to a constructive dialogue between the United States and Russia that can contribute for the formation of a new political relationship between the two nations? Second, did the findings indicate that the ABM Treaty can contribute to strategic stability in the post-Cold war world? Third, did the findings indicate that the ABM Treaty and TMD are compatible?

Based on the findings of the previous four chapters, at least one of the criteria was met by each chapter with all three being met by the collective findings of the four chapters together. Therefore, this thesis concludes that the ABM Treaty remains in the national security interests of the United States in the post-Cold War world. Based on this conclusion, this thesis recommends that the treaty, as currently written, should be maintained as an element in a post-Cold War world strategic stability regime. All current U.S. TMD programs can be pursued based on testing guidelines established by a unilateral revision of the parameters delineated by the "Foster Box" to reflect the range and velocity characteristics of modern strategic ballistic missiles possessed by the United States and Russia. In this manner, effective TMD systems can be developed, tested and deployed to meet

the emerging TBM threat while preserving the integrity of the U.S. and Russian strategic missile arsenals and of the ABM Treaty.

II. THE ORIGINS OF THE ABM TREATY

The Anti-Ballistic Missile (ABM) Treaty, signed by the United States (U.S.) And the Union of Soviet Socialist Republics (USSR) on May 26, 1972, has been hailed for many years as probably the most successful arms control regime of the Cold War. For over 20 years the ABM Treaty has been considered by many to be the "cornerstone" of the strategic nuclear relationship between Washington and Moscow. By applying stringent limitations on strategic ABM systems, the treaty assured both capitals that their nuclear retaliatory forces would retain "full deterrent capability" and that, in the absence of any meaningful defensive challenge, these forces would remain effective even if significant strategic arms reductions were undertaken. (Mendelsohn and Rhinelander 1994, 8)

According to George Bunn, one prominent interpretation is that:

the ABM Treaty was approved because of "hard-headed calculations by both the United States and the Soviet Union that neither could gain real protection in an unfettered offense-defense arms race. (Bunn 1990, 11)

This interpretation also holds that both sides thought that genuine security could more readily be attained through mutual agreement to limit defense than through an unending arms competition. Indeed, such a competition would be expensive. It would drain vital economic and technical resources necessary for other defense and social programs. Avoiding the economic and societal cost of such a competition was apparently a major motivating factor in the U.S., and presumably the Soviet, decision to negotiate the ABM Treaty. (Bunn 1990, 6) In a June 17, 1969 report to President Nixon, Henry Kissinger stated that:

...in my judgement, ...the Soviet leadership, faced with very real economic problems, would be more rather than less interested in seeking some form of slow down in the [arms] competition. (Kissinger 1979, 202)

Although, the ABM Treaty is very specific about the types of systems it limits, the treaty has its origins within a much broader framework of general strategic arms limitation theory that emerged during the Johnson administration. It was largely within this framework that United States and

Soviet policies towards strategic arms limitation evolved and that the ABM Treaty was formulated as one of the first products of that evolution. This is not to say that there were not differences in U.S. and Soviet motives for negotiating the treaty; there were, as this chapter will point out. However, it is to say that these differing motives culminated in a common solution as a result of a constructive dialogue between the two countries: a dialogue that would prove to be important in the further evolution of U.S. and Soviet - now U.S. and Russian - relations.

A. U.S. AND SOVIET STRATEGIC COMPETITION: COMMON CROSSROADS

As the U.S. and Soviet leaders entered the mid-1960s, both debated, internally, the merits of strategic arms control. In the mid-1960s, the U.S. leadership believed that the United States possessed 3-4 times more megatonnage in nuclear weapons than the USSR and thus decisive strategic superiority over them. Indeed, Secretary of Defense McNamara, in a 1965 interview in U.S. News & World Report declared that:

...the Soviets have decided that they have lost the quantitative race, and they are not seeking to engage us in that contest. It means that there is no indication that the Soviets are seeking to develop a strategic nuclear force as large as ours. (McNamara interview in U.S. News & World Report, April 12, 1965)

In view of this "margin of superiority," the Johnson administration argued that prevailing economic and budgetary considerations made it desirable for the United States to reduce the percentage of the country's Gross National Product (GNP) devoted to strategic programs. By reducing the size of U.S. strategic forces while improving them technically, it was believed that strategic superiority over the USSR could be maintained while reducing real annual direct expenditures on strategic programs by almost two thirds, thus making capital available for other areas of the economy. (Brennan 1975, IX) Thus the initial impetus for the Johnson administration's interest in advancing strategic arms control was based on primarily domestic economic rather than national security considerations. After all, Johnson had other military priorities, such as Vietnam, and costly domestic ambitions such as his "Great Society" and "War on Poverty" initiatives.

Following this "economic" arms control strategy, Johnson, in his first message to the Geneva Disarmament Conference in 1964, offered "to explore a verified freeze on the number and characteristics of strategic nuclear offensive and defensive missiles." (Bunn 1992, 107) This proposal was quickly rejected by the USSR, ostensibly because of requirements for on-site inspections at production and deployment sites within the Soviet Union. However, it is more likely that the Soviets rejected the proposal because they were still far behind the United States in both nuclear megatonnage and numbers of Intercontinental Ballistic Missiles (ICBMs) and did not want to get "frozen into" a position of inferiority.

As American satellite imaging technology improved, the principal declared Soviet objection to Johnson's "verified freeze" proposal was removed since the need for on-site inspections to verify compliance became less important. Still, the Soviets rejected the proposal. By the middle of 1965, the reason for continued Soviet rejection became apparent. U.S. satellite imagery showed that the number of Soviet strategic missiles and launchers was increasing rapidly, while U.S. strategic force levels were remaining constant. Johnson and McNamara became alarmed over this development and even more so over evidence of a Soviet ABM system being deployed around Moscow. Both men feared that this apparent Soviet escalation of the arms race would create congressional demands that the United States match this escalation and deploy an ABM system comparable to that of the USSR.

McNamara, specifically, opposed answering the Soviet build-up with the development and deployment of an American ABM system for two reasons. First, he did not believe that it was technologically feasible to field a system that would be effective for population defense. (Bunn 1992, 107) Second, he was a strong adherent to the concept of Mutual Assured Destruction (MAD), which suggests that the United States and the USSR each had to possess the ability to destroy a substantial portion of the other's society. According to the MAD theory, any attempt to limit this capability through strategic defenses would destabilize the U.S.-Soviet strategic stalemate. (Brennan 1975, 10) Johnson agreed with McNamara's arguments and initiated a diplomatic exchange with the Soviet Union to advance arms control talks. However, now that major impetus behind the Johnson arms limitation initiative was not primarily economic, but rather the threat to national security posed by the Soviet arms build-up.

In December 1965, the United States made secret overtures to the Soviets to explore their interest in limiting ABM systems. This initiative met with limited success. One year later the U.S. Ambassador to Moscow was instructed to propose private talks on limiting strategic arms in general. The Soviets accepted this proposal, which led to a Summit at Glassboro, New Jersey, in June 1967.

In January 1967, Johnson had proposed an ABM moratorium that would have frozen ABM development and deployment. The USSR rejected this proposal out of hand. Six months later, at the Glassboro Summit, Johnson and McNamara again attempted to persuade the Soviets to abandon their ABM program or at least to accept limits on it. The U.S. argument was based on the theory of "nuclear interdependence" that holds that if one country engages in an arms build-up to improve its security, its opponent will do likewise, out of suspicion or fear, thus escalating the arms race and making both countries less secure in the end. The Soviet response to Johnson's and McNamara's "interdependence" argument was typified by Soviet Premier Alexei Kosygin's belief that an ABM system was not a cause of the arms race but rather "a factor preventing the death of people." In Kosygin's view, this made the proposition of giving up defensive weapons absurd. (Kissinger 1979, 208)

Unable to change the Soviet position on ABM, Johnson announced the development of a "thin" nation-wide ABM shield to protect the United States from a possible Chinese attack. Johnson wanted to send a strong message to the Soviet but did not want to unnecessarily provoke them so he announced that the defense would be against a possible Chinese attack, (Kissinger 1979, 205) even though the Chinese in 1967 possessed no ICBM capability with which to strike the continental United States. Additionally, the monetary investment required for a defense based on a Chinese threat would be much less than that required for defending against a Soviet threat. As a second measure, late in 1967 the United States announced the development of Multiple Individually Targetable re-entry Vehicle (MIRV) warheads for its ICBM force. This would give the United States the capability to overwhelm any Soviet ABM defenses and also drive home to the USSR the validity of the U.S. administration's "interdependence" argument.

In early 1968, the Soviets responded to the U.S. strategic initiatives. They agreed to participate in strategic arms talks sometime in the future after the nuclear Non-proliferation Treaty (NPT) was signed and after they were satisfied they were approaching nuclear parity with the United

States. The specific Soviet concern with the NPT was to ensure that it was signed by west Germany. For the Soviets, "The West German signature in the NPT removed one possible requirement for an antimissile capability." (Yost 1988, 99) In July 1968 the Soviets stated that their conditions for participation in strategic arms talks had been satisfied and a final date would be set. However, the talks were put off for the remainder of the Johnson administration as a result of the Soviet-led Warsaw Pact invasion of Czechoslovakia in August 1968. Johnson did not want to be seen as sanctioning this aggression by engaging in negotiations with the Soviets right after the invasion, so, having brought the United States as far as he could in the strategic arms limitation process, he left its furtherance to his successor.

Strategic arms negotiations were approached cautiously by the Nixon administration for three reasons. First, like Johnson, Nixon did not want to appear too eager to negotiate with the Soviets after the Czechoslovakia invasion. Second, Nixon did not want to compromise his image as a tough anti-communist who could negotiate agreements with the USSR that were favorable for the United States. And third, in reviewing U.S. strategic policy, Nixon had to be careful not to antagonize defense conservatives of both parties in Congress whose support he would need in negotiating agreements with the Soviets. Additionally Nixon had to contend with scrutiny from elements of the arms control community who put all responsibility for arms control on the United States. Henry Kissinger, in White House Years, states:

However, the critics contended that it made no difference even if the Soviets had built an effective ABM. An American ABM program, whatever the provocation for it, would usher in a new round of the arms race threatening to the prospects for talks on strategic arms limitations. It was not explained why an American ABM still many years in the future would jeopardize the prospects for strategic arms limitation while an existing Soviet ABM system around Moscow would not. (Kissinger 1979, 207)

Over the long-term, Nixon and his National Security Advisor, Henry Kissinger, had a much grander plan for arms control than Johnson. In their plan, Strategic Arms Limitation Talks (SALT) were to be made the central element in a broad strategy of detente (lessening of tensions) that they believed offered several benefits to both the United States and the USSR. In Nixon's and Kissinger's view, both countries had a stake in greater cooperation, and shared interests in reducing the risk of

nuclear war and in curbing military expenditures. This cooperation could be used to resolve regional disputed where U.S. and Soviet interests clashed, such as in Vietnam and the Middle East. (Bunn 1992, 109) In the shorter-term, U.S. goals were to curb the growth of Soviet strategic offensive and defensive systems, protect the U.S. nuclear retaliatory force from a crippling first-strike and achieve meaningful strategic sufficiency vis-a-vis the USSR. (Bunn 1992, 110)

The Soviet response to Nixon's plan of detente was two-fold. Moscow agreed that both countries had an interest in greater cooperation towards avoiding war. But Moscow opposed Nixon's concept of linking arms control to Soviet foreign policy, where the Soviets, like the Americans, pursued their own interests. (Bunn 1992, 110)

Nixon and Kissinger were not satisfied with this response. In March 1969, Nixon announced an expansion of the Johnson administration's "Sentinel" ABM system. In addition to providing a "thin" ABM shield for population defense against a Chinese attack, ABM protection for four ICBM fields was added, thus increasing the survivability of the U.S. nuclear retaliatory force. On August 6, 1969, the Senate approved Nixon's proposal by a one-vote margin. "Sentinel" thus officially became "Safeguard" and a pure "bargaining chip" in that Nixon sensed how much the Soviets feared the U.S. system and were willing to come to an agreement limiting ABM systems, which the United States wanted, in order to prevent such systems from being deployed; but he also knew that Congressional support for actual deployment of the "Safeguard" system was marginal at best. (Bunn 1990, 14) In his 1978 memoirs, Nixon states:

We knew that even as the debate in Congress over an American ABM was raging, the Soviets had initiated work on more ICBMs and ABMs, as well as major new radar systems in conjunction with their deployment; they were also building additional submarine missiles. I felt that tactically we needed the ABM as a bargaining chip for negotiations with the Soviets: they already had an ABM system, so if we went into negotiations without one we might have to give up something else, perhaps something more vital. In that sense, we had to have it in order to be able to agree to forgo it. (Nixon 1978, 416)

Kissinger likewise believed that ABM was important as a "bargaining chip," because in his view, the Soviets did not respect unilateral concessions. In White House Years, Kissinger states:

I did not accept the proposition that unilateral restraint in weapons procurement on our part would evoke a comparable response from the Kremlin. As believers in the predominance of "objective factors," the Soviet leaders were likely to interpret such steps less as gestures of conciliation than as weakness, caused by domestic or economic pressures. (Kissinger 1979, 203)

After the "Safeguard" announcement, the Soviets agreed to participate in strategic arms limitation talks. The SALT negotiations began in Helsinki on November 17, 1969.

Although the nature of Soviet Society at the time of SALT I was such that historians may never know all of the facts and the "whole truth" surrounding the Soviet decision to engage in the SALT talks, there are several plausible theories concerning this issue. One such theory holds that as in the United States, economic considerations arguably furnished a motive for the Soviets to start down the "road" towards strategic arms talks. Such a theory is set forth by Lawrence T. Caldwell in his 1971 book, Soviet Attitudes to SALT. Although Caldwell's assessment is controversial, even today, it is used here to illustrate that scholarly analysis indicates that it is possible that the Soviet decision to engage in the SALT talks was motivated by an internal debate that had a foundation in economic considerations, just as the U.S. decision was spurred by economic considerations.

By the mid-1960s, at about the same time the Johnson administration decided to reduce expenditures for strategic programs, a debate within the Soviet Union between two influential poles of opinion, the "Modernists" and the "Orthodox," was intensifying. The "Modernists" believed that the Soviet economy was entering a qualitatively new phase of development - one dictated by the elevation of science and technology to the status of direct productive forces. (Caldwell 1971, 3) They emphasized technology and technical competence over ideology, and economics over politics. In some contexts, they acknowledged, this meant less party interference in ministries and enterprises. The "Modernists" also favored restraining military spending in order to redirect valuable resources to more vital areas of the economy. As the linchpin of their strategy, they focused on using negotiations as a means of (a) stabilizing the USSR's place in the international environment in general and (b) improving relations with the United States specifically.

The "Orthodox" beliefs were the direct antithesis of the "Modernist" positions. In addition, they stressed the natural and inevitable hostility of capitalism to socialism and the absolute need for high military expenditures and a robust military-industrial complex to provide security for the USSR

and its allies. They believed that the U.S. concept of detente was merely a tactical maneuver to place the Soviet Union in a position inferior to that of the United states. (Caldwell 1971, 3)

To fully understand this debate and the ensuing evolution in arms control policy in the Soviet Union, it is helpful to analyze these events in light of three models of foreign policy decision-making. The first model is Graham T. Allison's "Rational Actor" model. A version of this model, termed "Model I," was the first decision-making model to be applied in an effort to understand Soviet foreign policy decision-making. "Model I" was specifically constructed to fit a totalitarian government such as the USSR's: a government in which it was supposed that decisions were made at the highest levels of the Politburo, that conflict was negligible because the supreme loyalty was to the party, and that the single dominant party ideology allowed the leaders to successfully suppress any dissent. Additionally, "Model I" was predicated on the supposition that a nation's behavior could be explained by its goals. In the case of the USSR, it was supposed that these goals were confined to the military, foreign policy and domestic arenas. (Bennett 1989, 28)

In the military arena, "Model I" postulated that the Soviets sought to obtain the most favorable strategic nuclear balance possible and, if events permitted it, superiority over the United States. To accomplish this, they intended to restrict American technological development as much as practicable while preserving maximum leeway for a continued Soviet arms build-up in both technological and quantitative terms. "Model I" also postulated that the Soviets were intent on providing an adequate defense against any Chinese threat. In the foreign policy arena, "Model I" supposed that Soviet goals were to maintain and consolidate hegemony in eastern Europe. To accomplish this, the Soviets intended to increase their own world influence and prestige while weakening that of the United States and of the north Atlantic Treaty Organization (NATO). The Soviets also sought to prevent or at least minimize any U.S.-China alliance or rapprochement. Lastly, in the domestic policy arena, "Model I" proposed that Soviet goals were to maintain the legitimacy of the Soviet regime in the eyes of the population. To accomplish this they intended to boost economic growth and living standards through advances in science and technology.

The major weakness of "Model I," as is true of any simple "Rational Actor" model, is that it ignores the existence of internal policy processes within the Soviet Government. Indeed, the ongoing

debate between the "Modernists" and the "Orthodox" constituted an important policy process that was neglected by this model.

The second model of foreign policy decision-making - one in which the "Modernist-Orthodox" debate could be included - is the "Domestic Politics" model. This model assumes that governmental decisions result from an internal conflictual policy-making process that may involve national leaders, subordinate bureaucracies and interest groups. (Bennett 1989, 31) In this manner, the "Domestic Politics" model compensates for the weakness of "Model I" by recognizing that many specific aspects of arms control negotiations, such as which limits to accept on Soviet weapons as well as the general policies of detente and arms control, are controversial enough to elicit clashing views from within the Soviet Government. Paul R. Bennett, in his 1989 book, *The Soviet Union and Arms Control: Negotiating Strategy and Tactics* states:

Shared or imposed general values do not prevent policy conflict and thus a domestic politics model is needed in order to understand Soviet negotiating behavior adequately. (Bennett 1989, 31)

In light of the demonstrated deficiency in his "Rational Actor" model as applied to the Soviet Union, Allison proposed a third foreign policy decision-making model that could be successfully applied to the USSR. This model, called "Allison III," was a hybrid of the "Rational Actor" and "Domestic Politics" models. It suggests that the top leader chooses a preferred policy based on its internal political feasibility and its expected impact on his future power and authority. In essence, this model supposes that the leader makes decisions in a manner that enables him to cope successfully with internal political resistance. (Bennett 1989, 32) As events played out, Leonid Brezhnev, the General secretary of the Communist Party of the Soviet Union (CPSU), made a decision with respect to the "Modernist-Orthodox" debate and Soviet arms control policy that proved to be in consonance with "Allison III."

In the winter of 1968-1969 the usefulness of engaging in strategic arms negotiations with the United States was still being debated in the Politburo and also in the intelligentsia. Brezhnev, leaning heavily towards the "Modernist" position, decided on a compromise between the two positions that would result in a visible shift in Soviet policy towards the "Modernist" pole. Under Brezhnev's

leadership, the Politburo settled on a two-phase formula as the method of implementing this compromise. Phase I constituted a stage of ambiguity and caution towards arms control. This phase was essentially a "transition" period in which "Orthodox" resistance could gradually be overcome or appeased by the Soviet Government by delays in responding to American initiatives and by rhetoric and intransigence to raise and lower the level of diplomatic tensions. Phase II was a gradual and visible reorientation of Soviet policies towards the "Modernist" pole. The first manifestation of this phase was the commencement of strategic arms negotiations between the United States and the USSR in Helsinki in November 1969.

In addition to the "Modernist-Orthodox" debate, three other events arguably influenced the shift of Soviet arms control policy towards the "Modernist" pole. The first was Nixon's announcement of the "Safeguard ABM system. Although the Soviets had a rudimentary ABM system deployed around Moscow, they were very much aware that any U.S. system would be far superior, technologically, to their own and therefore much more effective. Knowing this, the Soviets believed that the best strategic defense they could employ would be to prevent the United States from deploying its system, thus leaving the U.S. nuclear force vulnerable to the numerical advantage the Soviet had achieved in megatonnage and delivery systems in late 1968.

The second event was General DeGaulle's resignation in 1969. DeGaulle's successor took a more favorable view of British entry into the European Economic Community (EEC). The Soviets feared that a robust and prosperous EEC might become a more formidable economic competitor in the areas in which, the "Modernists" contended, the USSR was most vulnerable. Additionally, they feared that a prosperous EEC, with Britain's added economic and military strength, would prove an irresistible lure for the attraction of Eastern European countries. (Caldwell 1971, 7)

The third event was an aggravation of Sino-Soviet tensions. In March 1969, these tensions erupted into nearly two weeks of ground and air combat on and over Damansky Island, located in the Ussuri River and claimed by both China and the USSR. U.S. News & World Report, covering the story, pointed out that many analysts at the time believed that this Sino-Soviet clash

served as a forceful reminder to Soviet military men that they face a two-front danger that imposes a strict limit on the Kremlin's freedom of maneuver and is one more reason why the Soviet leaders apparently are anxious for talks with President Nixon

aimed at stabilizing the European front. (U.S. News & World Report, March 17, 1969)

Additionally, it might be surmised that the Soviets were fearful that the Washington would achieve an alliance or at least a rapprochement with Beijing to the detriment of Moscow. Thus they decided that it was in their interest to establish a serious dialogue in arms control with the United States before such a U.S.-Chinese alliance or rapprochement could occur.

There was a one year interlude, between the Soviets agreeing to negotiate, in November 1968, and the actual commencement of the negotiations in Helsinki in November 1969. During this year, the major event that occurred was Phase I of the "Modernist-Orthodox" compromise. U.S. initiatives and responses to Soviet actions during this "transition" period were, in retrospect, reactions to this phase of domestic political maneuvering by the politburo and general Secretary Brezhnev to overcome "Orthodox" opposition.

During the 1968 campaign, Nixon championed a platform of peace through strength and tough anti-communism. The Soviets used Nixon's campaign rhetoric as a stalling tactic during the "transition," claiming that they believed that Nixon really meant that he intended to regain strategic superiority over the USSR. The Soviets maintained that they viewed such a position as confrontational and that they would not engage in negotiations from a basis of declared inequality in nuclear weapons. Nixon consulted his arms control advisors and military planners and responded to this situation by saying that the problem was nothing more than a question of semantics and that what the United States was striving for was nuclear sufficiency, not superiority. (Caldwell 1971, 10) In his memoirs, Nixon stated that at the beginning of his administration, he "began to talk in terms of sufficiency rather than superiority to describe my goals for our nuclear arsenal" because "putting an end to the arms race meant working out trade-offs with the Soviets,..." (Nixon 1978, 415) Although the Soviets accepted this "clarification" of the U.S. position, they continued to postpone negotiations.

On March 14, 1969, perhaps because he felt stonewalled by Soviet intransigence, Nixon announced plans to go forward with an ABM program. In his book, White House Years, Kissinger states:

Nixon's program called for twelve separate sites for area defense, of which four would also protect Minutemen, a total of nineteen radars, and several hundred interceptor missiles. It was to be completed by 1973. To show originality the Johnson "Sentinel" system was now renamed "Safeguard." It differed from "Sentinel" primarily in covering all of the United States with radars, providing a better base for rapid expansion against the Soviet Union, and concentrating somewhat more on defending ICBM bases. (Kissinger 1979, 209)

In taking this action, Nixon was responding to the increasing threat to the credibility of the U.S. nuclear deterrent posed by the continued Soviet strategic build-up. He was sending the Soviets the message that, although he would accept strategic sufficiency in lieu of superiority, he would not abandon his position of conducting negotiations from a position of strength in the face of delay and quibbling from the Soviet side. With respect to his announcement of the deployment of "Safeguard," Nixon reiterated that the purpose of the system was to protect the U.S. nuclear retaliatory force from an accidental or unauthorized Soviet attack and to provide a "thin" population defense against a Chinese attack. (Graybeal and McFate 1994, 5) The reasoning was here was that an accidental or unauthorized "rogue" attack from the Soviet Union or an attack from China could be defended against because such attacks would not constitute the focused and well coordinated offensive strike of a deliberately planned Soviet attack on the U.S. retaliatory force. In Kissinger's view, the "Safeguard" system also served another important purpose. "It would give us an option to expand the defense against the Soviet Union if SALT negotiations failed." (Kissinger 1979, 208) Relying on the "thin" population defense aspect of the system, Nixon contended that such a deployment would not adversely affect SALT because "the Soviet interest in strategic talks was not deterred by the decision of the previous [Johnson] administration to deploy the "Sentinel" ABM system - in fact, it was formally announced shortly afterwards." (Nixon cited in Kissinger 1979, 209)

As Nixon was making his response to what he viewed as Soviet "foot dragging," the "transition" phase of the Soviet shift towards "Modernism" was continuing. The Politburo was advancing arguments to "sell" arms control to the "Orthodox" intelligentsia. One of these arguments was that the "correlation of forces" had shifted in the Soviet Union's favor, so it could now negotiate with the United States from a position of strength. Caldwell argues that:

Soviet conventional and strategic forces were strong enough to deal with any Imperialist treachery. The new duty of proletarian internationalism was to wage an unending struggle for peace: a struggle that would create the conditions necessary for the creation of a scientific material base on which the Soviet Union could prosper. (Caldwell 1971, 10)

Indeed, this argument was echoed by high-level Soviet officials and party leaders during the session in the Supreme Soviet Presidium devoted to the ABM Treaty, in which they declared repeatedly that:

the SALT treaties were the result of the increase in the might of the Soviet Union and the change in the "correlation of forces" in the world arena to the advantage of socialism. (Yost 1988, 92)

These arguments that the United States had come to realize that the USSR possessed such superior strategic power, that it was impossible to wage war against it. As a result of this situation, the arguments concluded, the opportunity to improve relations between the United States and the USSR and to enhance the Soviet economic and technological position had to be seized "while forces of a like mind in the United States were vibrant and stronger than the military-industrial complex." (Caldwell 1971, 11) Finally, in November 1969, Phase I of the Soviet shift towards a "Modernist" foreign policy was completed, and Phase II began with the same event: the commencement of the strategic arms negotiations with the United States at Helsinki.

B. U.S. AND SOVIET GOALS IN NEGOTIATING SALT I

The United States and the USSR began the negotiating process at Helsinki in November 1969 with distinct goals. These goals were not necessarily the same. However, the ABM Treaty represented the avenue by which both sides could meet their goals. Indeed, "the Soviet decision to approve the treaty may well have been motivated by strategic and political goals quite at variance with endorsement of a principle of mutual vulnerability." (Yost 1988, 92) Secretary of Defense McNamara, believed it will be recalled, that this principle was crucial to maintaining stability in the nuclear age. The Soviets were apparently influenced by a judgement that their BMD systems would not be effective in protecting the USSR against a U.S. attack conducted with ICBMs and SLBMs. David Yost, in his 1988 book, Soviet Ballistic Missile Defense and the Western Alliance, states that:

The U.S. plan to deploy "Safeguard" to protect U.S. ICBMs and associated command centers threatened to blunt the effectiveness of Soviet preemptive strikes intended to cripple U.S. strategic control capabilities and to reduce the U.S. arsenal capable of threatening the USSR. (Yost 1988, 93, 94)

In this context, the USSR's goal was to stop the continued development and prospective deployment of "Safeguard." The Soviets evidently believed that the "Safeguard" system was far superior, technologically, to anything they would be capable of fielding for several years and that if deployed, "safeguard" would negate the numerical strategic superiority they had only recently achieved. Thus they had a distinct interest in slowing down U.S. BMD research and development efforts so as to gain time for the Soviet technology to catch up with that of the United States and to be able to maintain their BMD program at funding levels much lower than would be required if the U.S. were competing on a more intensive basis. (Yost 1988, 93)

Additionally, although the Soviets were aware of the risks and uncertainties attendant to any major war, their military doctrine was intended to hold those risks and uncertainties to the lowest possible level. In seeking maximum control of those risks, Soviet strategic thought placed great emphasis on damage-limiting strategies. (Yost 1988, 91) Since they felt that their own ABM system was inferior and thus incapable of achieving a significant "damage-limiting" effect in the event of a nuclear war, the Soviets determined that the best "damage-limiting" results could only be obtained through ensuring that the U.S. strategic retaliatory force remained unprotected from a Soviet retaliatory or even preemptive strike. (Brennan 1975, 15) To accomplish this goal, the Soviets were prepared to agree to limits on their strategic offensive forces only to the extent necessary to stop the U.S. ABM system from being deployed and to codify strategic parity with the United States.

The U.S. goals were to curb the growth of Soviet strategic forces, to substantially restrict the expansion of the Soviet ABM program and to advance detente.

C. THE IMPACT OF MIRVs ON THE SALT I NEGOTIATIONS

At the outset of the SALT I negotiations there were major disparities in the make-up of the two sides' strategic forces. The Soviets relied on large ICBMs and wished to impose limitations on the strategic forces held by U.S. allies and on U.S. forward-based weapons both afloat and on land. (Graybeal and McFate 1994, 6)

In SALT I, ABMs and MIRVs, in addition to the numbers of missile launchers on each side, were the key issues, with MIRVs being of singular importance. The Soviets seemed ahead in ABM deployment while the United States had developed what was thought to be a superior ABM system, but had not deployed it. The United States was ahead in developing MIRVs but had not completed testing them. On the other hand, the large Soviet ICBMs would be able to carry many more MIRVs than the smaller U.S. ICBMs, if and when the Soviets caught up in MIRV development. (Bunn 1992, 116) Thus, if there were limits on launchers but not on warheads, the Soviets could ultimately deploy many more warheads than the United States. Assuming greater accuracy as technology improved, the Soviets could then conceivably destroy most American ICBMs in a first strike. However, MIRVs were very important to U.S. strategy. In White House Years, Henry Kissinger states:

MIRVs had been developed in the Johnson administration to counteract the Soviet deployment of an ABM defense by saturating it with incoming warheads and to do so without increasing our number of launchers, which was thought to be destabilizing. The theory was that if in reaction to the Soviet buildup we increased the numbers of our own missiles, we would spur the arms race; if, however, we increased the number of warheads carried on each individual missile we could guarantee our retaliatory capacity without running this risk. If the Soviets expanded their ABM system our missiles with multiple warheads could overwhelm it. And even if only a small number of our missiles survived a surprise attack, so the argument ran, those few would still be able to inflict unacceptable damage on an aggressor because they carried several warheads. (Kissinger 1979, 210)

Given that the United States was ahead in MIRV technological development and the USSR was ahead in potential MIRV "throw-weight," there was little support on either side for proposals to ban or even limit MIRVs. For the Soviets, the potential for MIRV development represented another avenue to maintain and possibly improve their numerical nuclear superiority over the United States, given the high "throw-weights" of their larger missiles. For the United States, MIRVs represented an "in-hand" capability that could reinforce the "MAD" deterrence concept while at the same time maintaining the strength of the numerically inferior U.S. nuclear retaliatory force against its numerically superior Soviet opponent. (Bunn 1992, 119) In this manner, MIRVs actually facilitate the acceptance of rigid limitations on ABM systems by defense-minded Congressmen and Senators

in Washington and by the "Orthodox" opposition in Moscow. However, despite the lack of true support for limiting MIRVS, they were part of the bargaining in the SALT I negotiations.

The negotiations opened with a U.S. proposal consisting of three elements: limit ABM deployments to the defense of Moscow and Washington, D.C., allow the production of MIRVS on both sides but ban their testing and deployment (a ban which would be verified by on-site inspections), and freeze the number of strategic offensive missile launchers on both sides at 1969 levels.

The Soviets responded by proposing a ban on production as well as deployment of MIRVS, but none on MIRV testing. They also proposed eliminating the verification provision of on-site inspections. Since the Soviets were not far enough [along] in MIRV development to begin testing, they had reason not to limit it. For the Americans, however, [banning] "testing was key both to preventing Soviet development and to verifying a ban on deployment without on-site inspection because developing reliable MIRVS without testing was thought to be impossible." (Bunn 1992, 119) However, the Soviets did accept the U.S. proposal to restrict ABM deployments to the national capitals of the two countries.

In response to this Soviet counter-proposal, the United States revised its first approach and made a second proposal. The provisions limiting ABM deployment to the national capitals remained the same, but no limits were proposed on MIRVS and deeper cuts were proposed in strategic delivery vehicles than the first U.S. proposal. For the Soviets, these reductions in delivery vehicles would have to come from their large missiles that could carry many MIRVS, once they developed them. These types of missiles were the ones most threatening (when MIRVed) to the U.S. ICBM force. For the United States, the reductions in strategic delivery vehicles could have come largely from the retirement of obsolete intercontinental bombers. Again, with the exception of the provisions limiting ABM system deployment, the Soviets rejected the proposal on the grounds that it left the United States with a numerically and qualitatively superior strategic bomber force that - coupled with the U.S. lead in MIRV technology - would serve to negate the numerical advantage in strategic missiles and launchers that the Soviets had achieved through their arms build-up. The Soviets continued to accept the U.S. proposals with respect to ABM systems because these proposals were in their view distinctly advantageous to them. They already had an ABM system deployed and operational around Moscow whereas the United States had no system deployed around Washington. In the Soviet view,

the Moscow system could serve as a baseline for modernization and continued ABM research and development that might eventually help them catch up with U.S. ABM technology. Kissinger was secretly hoping that the Soviet acceptance of the ABM provisions would lead the Soviets to seek, in addition, a limited broad area ABM system to guard against a Chinese strategic threat. This would have validated the "thin" population defense element of Nixon's "Safeguard" Phase II system and helped to gain continued congressional support in keeping "Safeguard" alive for the administration to use as a "bargaining chip" with the Soviets. Kissinger feared that there would be little congressional support for deploying a "Washington, D.C. only" ABM system. (Kissinger 1979, 207)

D. THE ABM TREATY CONCLUDED

Since the inception of the negotiations, limits on ABM systems had been linked with limits on strategic delivery systems. The SALT talks stalled throughout 1970 over the inability to reach agreement on MIRV and strategic bomber limitations, in spite of general agreement on proposed ABM limitations. Face with the prospect of delays due to disagreement over offensive force limitations, the Soviet Union proposed that the sides agree on an ABM Treaty while leaving offensive forces to a subsequent negotiation. However, the United States insisted on "dual" agreement, hoping to use its ongoing ABM deployment program to gain Soviet concessions on offensive arms. (Graybeal and McFate 1994, 6) Finally, in January 1971, in an effort to overcome the impediments stalling the negotiations, Kissinger and the Soviet Ambassador to the United States, Anatoly Dobrynin, in a "backchannel" negotiation, agreed that a comprehensive ABM accord would be accompanied by a more limited agreement on offensive arms - which became known as the Interim Agreement on Offensive Arms - and that more comprehensive offensive limitations would be determined in a future SALT II negotiations. (Graybeal and McFate 1994, 7) With this decision, negotiations began moving again. In July 1971, the United States advanced an "ABM only" proposal. The U.S. proposed that each side be permitted to choose between one of two options in deploying its ABM systems. The first option was to deploy systems around the national capitals alone while the second option was to deploy systems at four separate ICBM fields.

By adding the option of deploying system for the defense of strategic forces, Nixon and Kissinger were attempting to accomplish two objectives. The first was to maintain continued

congressional support for "Safeguard" so it would continue to be available as a "bargaining chip" in the negotiations. To retain the needed support, there had to be a strategically relevant deployment of the system: the Congress would not support a "Washington only" deployment. The second objective was to provide a strong incentive for the Soviets to come to an ABM agreement quickly. The 1972 elections were looming on the horizon for Nixon and he apparently felt that he badly needed a tangible diplomatic success to lessen the domestic unpopularity he had incurred for continuing and expanding the Vietnam War during his first term. Sensing that the Soviets placed a high priority on keeping the U.S. strategic force undefended as a method of limiting damage to themselves in the event of a nuclear war, he believed that the incentive for the Soviets to reach an agreement promptly would be his measures to protect a large portion of the U.S. strategic missile force from a Soviet first strike. (Kissinger 1979, 208)

The Soviets rejected this proposal on the grounds that any provisions authorizing the defense of a large number of strategic missiles would be a destabilizing influence in the U.S.-Soviet relationship. In retrospect, it appears that the real reason for the Soviet rejection of this proposal was that they knew the United States could field an effective ABM defense of a limited number of ICBM fields and that they were years, if not decades away from such a capability.

In response to this Soviet rejection, the United States proposed a complete ban on all ABM systems on both sides. The Soviets quickly accepted this proposal. However, Nixon had to back away from it for fear of causing a "revolt" by congressional conservatives of both parties who had supported "Safeguard" development and deployment for over two years. It was clear that both sides, for different reasons, wanted to maintain options for ABM research and development (R&D) and limited deployments. In the U.S. case, the Defense Department and the Joint Chiefs of Staff (JCS) recognized that obtaining funds from the Congress for ABM R&D with no ability to deploy actual systems would be difficult. Additionally, the JCS argued for limited deployments in order to gain operational experience with ABM systems. The Soviets were deploying ABM systems around Moscow, and did not wish to abandon this defensive capability around their capital. (Graybeal and McFate 1994, 27)

In the wake of Nixon's withdrawal from his own proposal to ban ABM, the negotiations once again stalled. Finally, just before the Moscow Summit of May 1972, a compromise acceptable to

both sides was struck between the initial U.S. proposal limiting ABM deployment to the national capitals only and the second U.S. proposal giving the option of defending four ICBM fields. The compromise agreement provided for each side having two deployed ABM systems, one for the protection of its national capital and the other for the protection of an ICBM field. On May 26, 1972, President Nixon and General Secretary Brezhnev signed the SALT I agreements, including both the ABM Treaty and the Interim Agreement on Offensive Arms. The ABM Treaty banned nation-wide ABM systems, while allowing each side to maintain the ABM site it then possessed, and to build one of the type being built by the other side, for symmetry. The Interim Agreement froze each side's missile launchers at the level then operational or under construction for five years, but did not place any limits on MIRVs (allowing a major buildup in missile warheads on both sides) or on bomber forces, either afloat or land-based. (Bunn 1990, 15) The ABM Treaty of 1972 was modified in 1974 to permit just one site on each side, for protection of either its national capital or an ICBM field. The United States deployed an ABM system to protect an ICBM field near Grand Forks, North Dakota, but soon dismantled it. The USSR maintained its system around Moscow and continued research and development to modernize it.

In the end, the ABM Treaty of 1972 actually symbolized, for both the United States and the USSR, the achievement of the goals that they entered the negotiations with. The Soviets stopped the U.S. ABM deployment that they believed would in large part negate the numerical strategic superiority they had achieved over the United States. With the decoupling of defensive limitations from offensive limitations in January 1971, the Soviets could also say that they had achieved that goal without making any concessions in terms of strategic offensive systems and that they had thus codified strategic parity with the United States. The U.S. goal of restraining Soviet ABM development and deployment was achieved. And, in spite of the decoupling of defensive and offensive limitations, the United States could also claim success, within the broader framework of the entire SALT negotiation, in its goals of advancing the concept of detente and obtaining some offensive force concessions from the USSR in the form of the Interim Offensive Forces Agreement. (Kissinger 1979, 208)

The predominant view in the United States was that the ABM Treaty would essentially freeze the status of ABM systems as it existed in the late 1960s: the Soviets were allowed to keep their

deployed and fully operational site around Moscow, while the United States had a system developed but not deployed (after the dismantling of the Grand Forks system). The major change to the status of ABM came in the restrictions on testing to develop more advanced systems. Proponents of the "mutual vulnerability" model of strategic stability contend that the ABM Treaty was so successful as an arms control regime throughout the remainder of the Cold War and into the early post-Cold War world, because its creation constituted a "win-win" proposition for the two participants. In their view, the ABM Treaty was the result of common interests and common goals.

A significant benefit of this 'win-win' proposition embodied in the ABM Treaty was the predictability that it injected into military planning and arms control negotiations. The treaty fostered a predictable strategic balance by moderating fears of widespread missile defense, allowing each side to plan its strategic forces with the knowledge that the other side could not put even a limited nationwide missile defense in place for at least several years. "Without the ABM Treaty, the inevitable uncertainties in predicting the course of a technological competition between ballistic missiles and missile defenses would have enormously complicated military planning." (Bunn 1990, 7) In essence, unable to predict what mix of offensive and defensive technologies the other side might develop in ten years, each side might have increased its forces to meet plausible "worst case" future threats, intensifying the offense-defense arms race.

"Because improvements in offensive forces are the surest way to overcome an opponent's defenses, offense and defense are inextricably linked." (Bunn 1990, 7) Champions of mutual vulnerability theory have argued that limits on missile defenses provide the soundest foundation for strategic arms reductions. They believe that continuing to reduce the U.S. and Russian strategic arsenals will help to prevent the future proliferation of WMD and their delivery systems. TMD supporters, by contrast, argue that in a bi-polar world, effective missile defenses provide the soundest basis for discouraging and, in some cases, even preventing missile and WMD proliferation. Proponents of the ABM Treaty believe that the treaty is even more critical today as the "bi-polar confrontation" of the Cold War gives way to a multi-polar post-Cold War world. The treaty will be needed, they suggest, to continue reductions in U.S. and Russian nuclear arms as well as to provide a demonstration to Third World Countries of the major powers' dedication to adhering to the spirit of the NPT, which was extended indefinitely in May 1995. After all, there has been a long-standing

link between the NPT and the ABM Treaty in that the Soviet Union made ratification of the NPT, notably by the Federal Republic of Germany, one of the prerequisites for it to commence strategic arms limitation negotiations.

In the international realm, the ABM Treaty played a significant role in shaping U.S. nuclear policy during the Cold War. But what was the domestic significance, if any, of the treaty? It is to this subject that chapter III will now turn.

III. THE DOMESTIC POLITICS OF THE ABM TREATY

The debate over the ABM Treaty has continued since the Nixon administration submitted the treaty to the Senate for formal advice and consent during the summer of 1972. This debate has centered on the restrictiveness of the treaty and the prohibitions it places on the nations' ability to conduct research, testing and development of strategic defensive systems to protect ourselves as well as our allies. Most recently it has turned to the permissibility of certain TMD systems under the treaty. It has peaked three times since 1972: President Reagan's announcement of the Strategic Defense Initiative in March 1983 and the ensuing Senate hearings prompted by the administration's interpretation of the ABM Treaty; the passage of the Missile Defense Act of 1991 in the wake of the Gulf War; and the Clinton administration's ongoing efforts, beginning in November 1993 to achieve an agreed understanding with Russia that would make it clear that theater missile defense systems are ABM Treaty-compliant.

The current debate surrounding the ABM Treaty's utility for national security is polarized based on Cold War paradigms. Treaty supporters believe that ballistic missile defenses could reignite a U.S.-Russian arms race and thus endanger current strategic arms agreements. Treaty opponents argue that it is imprudent to leave one's population undefended against ballistic missile attack and that, with the end of the Cold War, the treaty has lost any relevance it may have had. As a consequence of the Cold War orientation of this polarized debate, the ABM Treaty debate is often diverted to issues of national missile defense, which is regulated by the treaty, instead of being focused on theater missile defense, which is not regulated by the treaty. As a result, this debate often does not adequately address the current policy issues that bear on U.S. national security and the ABM Treaty's connection or potential connection to those security issues.

This chapter discusses the role the ABM Treaty has played in U.S. security policy from its ratification to the present day and answers the question, "Is the ABM Treaty still useful to U.S. national security interests in the post-Cold War world of 1995 and beyond?"

A. THE ABM TREATY RATIFICATION DEBATE

In 1972, supporters of the ABM Treaty believed that it would serve to foster peaceful coexistence between the superpowers. In their view, the ABM Treaty implied that the United States and the Soviet Union had accepted stringent quantitative as well as qualitative limits on their current and future strategic missile defenses. Both sides agreed not to develop, test, or deploy, ABM systems beyond those specifically permitted in the treaty and not to convert non-ABM systems or technology to support an ABM capability.

The treaty's supporters saw its significance as residing in three areas. Militarily, it strictly regulated ABM research, testing, development and deployment and specifically prohibited the development, testing and deployment of sea-based, mobile land-based, space-based and air-based systems. (ABM Treaty 1972, Article V) Politically, it was, as Senator Joe Biden (D. De) stated in 1987, regarded as "a carefully calculated means of protecting our national security by preventing a spiraling competition in nuclear weapons and by providing the foundation for reductions in those nuclear weapons." (Biden, Joint Hearing on "The ABM Treaty and the Constitution" 1987, 3) Finally, the treaty's supporters argued that it institutionalized a deterrence posture based on the concept of Mutual Assured Destruction (MAD). In essence they believed that the ABM Treaty made permanent the concept of deterrence through mutual terror: by giving up missile defenses, each side was leaving its population and territory hostage to a strategic missile attack. Each side therefore had an ultimate interest in preventing a war that could only be suicidal.

When the treaty was presented to the Senate by the executive branch for advice and consent to ratification in 1972, it appears that there was no doubt, on the part of the 100 Senators, that it would serve to institutionalize the concept of MAD. The Senators apparently interpreted the treaty as signifying an explicit commitment to the strategic principle of security based on mutual vulnerability. In Congressional testimony in 1987, former Secretary of State Edmund Muskie stated that:

The significance of this treaty is that both sides have recognized that they will remain vulnerable to retaliation in a nuclear exchange, and this, in turn, greatly diminished the prospect that either side might ever seriously consider launching nuclear war. The

limit on ABMs provides the foundation for nuclear stability. (Muskie cited in Joint Hearings on "The ABM Treaty and the Constitution" 1987, 28)

This issue of institutionalized mutual vulnerability was at the center of the 1972 ABM debate.

It was clear that both supporters and opponents of the treaty during the ratification debate of 1972 understood that the prohibition against the development, testing and deployment of strategic defensive systems, beyond those specifically permitted in the treaty, was of indefinite duration. The "narrow interpretation" of the treaty holds that any development, testing or deployment of sea-based, space-based, air-based or mobile land-based strategic defenses using current or future technologies (termed "other physical principles" in Agreed Statement D) is strictly prohibited as long as the United States remains a signatory to the treaty. However, in determining whether they would support the treaty, the Senators understood that any perceived disadvantages to the agreement had to be weighed carefully against any long-term benefits that treaty might hold. The dividing line in the Senate in 1972, between opponents and supporters of the treaty, was based on the relative costs and benefits of the treaty and not on any disagreement on its interpretation.

Opponents of the ABM Treaty saw several disadvantages that they believed outweighed the treaty's benefits. They agreed with the findings of the Betts Commission, appointed by Secretary McNamara in 1963 to study how strategic defense would affect nuclear deterrence. That group concluded that offensive technology had not outstripped defensive technology, and that strategic defenses would limit damage in case of a nuclear attack and would not disrupt the balance of mutual nuclear deterrence. (Baucom 1992, 22-23) Thus, opponents of the treaty objected to the fact that the technological capability of the United States to develop strategic defenses to protect against a numerically superior Soviet nuclear offensive capability was severely restricted by the treaty. Treaty opponents also believed that a second disadvantage resided in the limits on future ABM technologies. Research and research testing of future ABM technologies was permitted under the treaty, and Agreed Statement D provided an avenue for determining the incorporation of future technologies into the ABM Treaty regime, in the event it was believed by either party that a particular technology held "a possibility for improving the security of the world." (Allison cited in Joint hearings on "The ABM Treaty and the Constitution" 1987, 10) However, in the view of treaty opponents, the United States

was agreeing to curtail any future development and deployment of ABM systems as long as it remained a party to the treaty.

The supporters of the ABM Treaty believed it provide several advantages. First, they argued, the treaty offered the opportunity to reduce the overall threat of nuclear war between the superpowers. By prohibiting both superpowers from developing and deploying strategic ballistic missile defenses, it might promote restraint in the offensive strategic arms race. Neither side would have to worry about overcoming strategic ballistic missile defenses in a nuclear engagement. Howard G. DeWolf, in his book, SDI and Arms Control, echoed this reasoning in 1989 when he wrote that:

Although deployed [treaty permitted] Soviet ABM systems must be dealt with in U.S. nuclear planning, they aren't considered a substantial threat to offensive success. Similarly, the Soviets aren't faced with any defenses when planning a potential nuclear strike on the United States. (DeWolf 1989, 11)

Since both sides would be vulnerable strategically, the incentive for conducting a strategic first strike would be greatly reduced: a retaliatory strike would cause unacceptable damage to the attacker. In this manner, it was argued, the stability of U.S.-Soviet nuclear deterrence would be enhanced because the effectiveness of a nuclear retaliatory strike would be guaranteed by the constraints on strategic ballistic missile defenses. Many treaty supporters also pointed out that such assurance injected a certain element of predictability and stability in U.S.-Soviet relations that further enhanced the mutual deterrence.

The second benefit that treaty supporters saw was the opportunity to reduce large expenditures for what defense-spending critics viewed as redundant strategic offensive systems to counter opposing defenses. In White House Years Henry Kissinger stated that:

The passionate critique of the war in Vietnam spread to an attack on the defense establishment as a whole; indeed, some saw in an assault on the defense budget a device for forcing an end to the war in Southeast Asia. Reordering national priorities from defense to domestic programs as the slogan of the period; it was a euphemism for severe cuts in the defense budget. (Kissinger 1979, 199)

In supporting the ABM Treaty, these critics of defense spending also leaned on the “interdependence” argument that President Johnson and Secretary McNamara had made to Premier Kosygin at the 1967 Glassboro summit: an increase in defense on one side would only be met with a larger increase in defensive as well as offensive capability on the opposing side, thus making both sides less economically and militarily secure.

Finally, the ABM treaty was seen by its supporters as a means of providing a foundation for future arms control. Indeed, article XI of the treaty mandates that “the parties [to the treaty] undertake to continue active negotiations for limitations on strategic offensive arms.”

By accepting the revolutionary concept that the two major powers deliberately based their security on their mutual vulnerability, the treaty’s supporters hoped that it would assure both the Soviet Union and the United States that their nuclear retaliatory forces would retain full deterrent effectiveness even if offensive force levels were limited or reduced in the future. Conversely, its supporters believed, “...without the ABM Treaty, the large-scale deployment of anti-ballistic missile systems would undermine efforts to shrink strategic arsenals and could even provoke the United States and Russia to increase strategic offensive forces to overcome any perceived threat to their retaliatory capability.” (Mendelsohn and Rhinelanders 1994, 8) According to this view, the ABM Treaty played a crucial role in strategic arms control from the largely symbolic beginning of the interim Offensive Forces Agreement of 1972 - which it was hoped, would serve as a “temporary freeze on the numbers of ICBMs and SLBMs that each side could possess until a permanent agreement was negotiated (Nixon 1978, 616) - to the equal aggregate limitations of the never-ratified SALT II in 1979 to the historic reductions of the Intermediate nuclear Forces (INF) Treaty of 1987 and the Strategic Arms Reduction Treaties (START) I and II of 1991 and 1993 respectively.

Ultimately, two Senators voted against the ABM Treaty, James Buckley of New York and James Allen of Alabama. They believed that the military and moral disadvantages of the treaty outweighed the advantages. They argued that the United States possessed the scientific and technological capability to defend against nuclear attack and that it “was immoral and an invitation to nuclear blackmail” to enter into a treaty that prevented one from ever developing an deploying such defense of one’s nation. (Allen, Congressional Record, August 3, 1972) Even among the

Senators who ultimately supported the treaty, this reasoning was fully considered and reflected in statements during floor debate.

Senator Strom Thurmond's (R. S.C.) position was representative of the Senators who supported the treaty's ratification. Although he realized that the right of the United States to conduct research into new ABM technologies was protected by the treaty, he also knew, based on the executive branch presentation of the treaty, that at the same time it restricted any steps beyond research, development and deployment permitted within the treaty's limits. He echoed the views of Senators Buckley and Allen when he voiced his reservations concerning the prohibition on systems based on new technologies:

It effectively prevents us from ever having the means to protect our population from a Soviet first strike. It also prevents us from developing new kinds of systems to protect our population. The most promising type appears to be the laser type, based on entirely new principles. Yet, we forego forever the ability to protect our people. (Thurmond cited in Joint Hearings on "The ABM Treaty and the Constitution" 1987, 28).

After the advantages and disadvantages of the ABM Treaty were weighed by the Senate, that body advised and consented to ratification by the president with a vote of 98 to 2 on August 3, 1972. When the treaty was ratified by President Nixon on September 30, 1972, the United States and Soviet Union agreed to abide by the following restrictions on their strategic defenses for an unlimited duration:

Article I

1. Each party undertakes to limit anti-ballistic missile (ABM) systems and to adopt other measures in accordance with the provisions of this Treaty.
2. Each party undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense, and not to deploy ABM systems for defense of an individual region except as provided for in Article III of this Treaty.

Article III

Each party undertakes not to deploy ABM systems or their components except that:

a. within one ABM system deployment area having a radius of one hundred and fifty kilometers and centered on the party's national capital, a party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, and (2) ABM radars within no more than six ABM radar complexes, the area of each complex being circular and having a diameter of no more than three kilometers; and

b. Within one ABM system deployment area having a radius of one hundred and fifty kilometers and containing ICBM silo launchers, a party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, (2) two large phased-array ABM radars comparable in potential to corresponding ABM radars operational or under construction on the date of signature of the Treaty in an ABM system deployment area containing ICBM silo launchers, and (3) no more than eighteen ABM radars each having a potential less than the potential of the smaller of the above-mentioned two large phased-array ABM radars. (This article was amended by the Protocol to the ABM Treaty of 1974 to limit each party to ABM deployment at only one site, either the national capitol or an ICBM field. All other provisions of Article III remained the same.)

Article V

1. Each party undertakes not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based.

2. Each party undertakes not to develop, test, or deploy ABM launchers for launching more than one ABM interceptor missile at a time from each launcher, not to modify deployed launchers to provide them with such a capability, not to develop, test, or deploy automatic or semi-automatic or other similar systems for rapid reload of ABM launchers.

Article VI

To enhance assurance of the effectiveness of the limitations on ABM systems and their components provided by the Treaty, each Party undertakes:

(a) not to give missiles, launchers, or radars, other than ABM interceptor missiles, ABM launchers, or ABM radars, capabilities to counter strategic ballistic missiles or their elements in flight trajectory, and not to test them in an ABM mode; and

(b) not to deploy in the future radars for early warning of strategic ballistic missile attack except at locations along the periphery of its national territory and oriented outward.

Article VIII

ABM systems or their components in excess of the numbers or outside the areas specified in this Treaty, as well as ABM systems or their components prohibited by this Treaty, shall be destroyed or dismantled under agreed procedures within the shortest possible agreed period of time.

Article IX

To assure the viability and effectiveness of this Treaty, each party undertakes not to transfer to other states, and not to deploy outside its national territory, ABM systems or their components limited by this Treaty.

Article X

Each party undertakes not to assume any international obligations which would conflict with this Treaty.

The United States and the Soviet Union professed to believe that the ABM Treaty could serve as a mechanism to curb the offensive arms race, "...contribute to the creation of more favorable conditions of further negotiations on limiting strategic arms," "...achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament," as well as to relax international tensions. (ABM Treaty of 1972, Preamble)

For eleven years following its ratification, the ABM Treaty was accepted within this 1972 framework; deterrence based on mutual vulnerability was regarded as the foundation of Cold War stability.

B. THE ABM TREATY AND THE SDI DEBATE

President Reagan's 1983 proposal for a Strategic Defense Initiative (SDI) created a new ABM debate. Reagan, like most opponents of the ABM Treaty, abhorred the concept of Mutual Assured Destruction as the centerpiece of strategic deterrence. According to former Secretary of State George Shultz:

The idea of relying on the ability to wipe each other out as the way to prevent war had no appeal to Ronald Reagan. How much better it would be, safer, more humane, the president felt, if we could defend ourselves against nuclear weapons. Maybe there was a way, and if so, we should try to find it. (Shultz 1993, 246)

This reasoning echoed the statements of Senators Buckley and Allen during the ratification hearings in 1972. President Reagan's idea for replacing MAD was the Strategic Defense Initiative, proposed in his speech on "Defense and National Security" on March 23, 1983. President Reagan's proposal consisted of four key elements:

1. Marshall all applicable modern technology in a high priority coordinated effort to develop effective strategic defenses against intercontinental ballistic missiles and submarine-launched ballistic missiles.
2. Realizing that it may be decades before viable strategic defenses were ready for development, in the interim, maintain a strong nuclear deterrent posture and a robust capability for flexible response in continued close cooperation with our allies so as to ensure the continued honoring of all U.S. commitments (including the ABM Treaty).
3. Concurrently pursue real arms reductions while negotiating from a position of strength achieved through a consistent strategic modernization program.
4. Take steps to reduce the risk of conventional conflict from escalating to nuclear war by improving conventional capabilities. (Cimbala 1987, 16, 17)

Of the four elements of the SDI proposal, the most provocative was the drive to develop a nationwide strategic defensive shield against ICBMs and SLBMs. To many observers it represented a switch from deterrence based on offense and mutual vulnerability to deterrence based on defense, a fundamental change that had the potential to shake the very foundations of the Western alliance. In the view of its opponents, SDI had the distinct potential to create instability in the Cold War confrontation by expanding the offensive arms race and adding a defensive dimension to it as well. Concerning the issue of deterrence stability, George Shultz noted in his memoirs:

...if we put a defensive system in place and continue to maintain our offensive weapons, the result is destabilizing. The Soviets will see this as an effort to render their offensive capability obsolete by the end of the century. (Shultz 1993, 252)

Dr. Don Baucom, the Senior Historian of the Ballistic Missile Defense Organization (BMDO), in his book, The Origins of SDI: 1944-1983, wrote that while President Reagan viewed SDI as an avenue to achieve the eventual elimination of nuclear weapons, its opponents, like the opponents of ABM systems in the late 1960s and 1970s, saw it as representing "all that they detested in American defense policies. It represented costly and unnecessary weapons that were draining the national treasury." (Baucom 1992, 50) Some ABM Treaty supporters based their opposition to SDI on the reasoning that NATO flexible response strategy rested on the capability for three levels of response to aggression: direct defense, deliberate escalation, and a general nuclear response. Thus, the guaranteed effectiveness of United States strategic offensive forces was the ultimate guarantee of deterrence credibility with respect to the Soviet Union. The implications for the viability of the U.S. strategic deterrent of a possible Soviet response to SDI in the form of a deployment of more extensive Soviet strategic defenses were profound, they argued. Concern about the guaranteed effectiveness of western nuclear deterrents was particularly widespread in Britain and France. The effectiveness of their relatively small nuclear arsenals was dependent upon the vulnerability of Soviet industrial and urban targets.

Other SDI opponents believed that strategic defenses would make the superpowers more likely to engage each other in conventional conflict around the world. European as well as American Atlanticists believed it would encourage a "Fortress America" mentality in which the United States would be reluctant to take the risk of engaging in nuclear war to guarantee Western Europe's security, thus leaving its safety to the whim of the Soviets. (Cimbala 1987, 7) In contrast, supporters of SDI believed that it would actually enhance the deterrent credibility of the United States: SDI would make U.S. policy makers more willing to fight on behalf of the European allies because America's safety from nuclear attack would be guaranteed. The most important domestic implication of the SDI proposal was the congressional debate that it raised about its compliance with the ABM Treaty.

Agreed Statement D of the ABM Treaty states the following:

In order to insure fulfillment of the obligation not to deploy ABM systems and their components except as provided in Article III of the Treaty, the Parties agree that in the event ABM systems based on other physical principles and including components capable of substituting for ABM interceptor missiles, ABM launchers, or ABM radars are created in the future, specific limitations on such systems and their components would be subject to discussion in accordance with Article XIII and agreement in accordance with Article XIV of the Treaty.

To develop an effective SDI system, an extensive research and development (R&D) program on what Agreed Statement D calls "other physical principles" would have to be carried out. To support Reagan's goal of deploying an effective ballistic missile defense shield that would render "nuclear weapons impotent and obsolete" by making it certain that they would be destroyed prior to reaching their targets, this R&D program needed to go far beyond what had traditionally been regarded as permissible by the ABM Treaty, especially by the "narrow" interpretation of Agreed Statement D. SDI R&D would have to go far beyond laboratory research and research testing of components based on "other physical principles" to field development and developmental testing of actual systems. The domestic ABM Treaty debate with respect to SDI centered around the interpretation of Agreed Statement D.

As the SDI program matured beyond the organizing phase and the SDI Organization (SDIO) was formed in 1984 to consolidate all SDI-related research and development under a single "Manhattan Project"-type entity, the debate intensified. In the spring of 1987, joint congressional hearings were held on the "ABM Treaty and the Constitution." The general subject of the hearings was the permissibility, under the ABM Treaty, of the development and testing of SDI systems. Many Senators believed that the president was justifying this development and testing activity by reinterpreting Agreed Statement D of the ABM Treaty. They were challenging the President's constitutional authority to reinterpret a treaty while implicitly ignoring what the Senate had understood the treaty to mean when it gave its advice and consent to ratification.

1. Agreed Statement D “Narrow” vs “Broad” Interpretation

In 1972, the Senate gave its advice and consent to ratification of the ABM Treaty with the understanding that Agreed Statement D represented a prohibition on all development and developmental testing of ABM systems based on “other physical principles” (that is, futuristic ABM technology that did not exist at the time of the treaty’s ratification.) This interpretation has become known as the “narrow” or restrictive interpretation of the ABM Treaty. However, on October 6, 1985, President Reagan’s national security advisor, Robert McFarlane, stated that the ABM Treaty did indeed permit not only research but also development and developmental testing of SDI systems, including systems that were futuristic in 1972. He stated that the ABM Treaty, specifically Agreed Statement D, makes clear that:

...on research involving new physical concepts, that activity as well as testing, as well as development, indeed, are approved and authorized by the treaty. Only deployment is foreclosed, except in accordance with articles XIII and XIV. (Shultz 1993, 578)

This position was not based on the traditional reading of the treaty, but rather on the examination of the treaty’s negotiating record by the state department’s legal advisor, Judge Abraham Sofaer. Based on his extensive study of both the written treaty and the negotiating record, Judge Sofaer concluded that the U.S. negotiators had “tried but failed” to persuade the Soviets to accept a prohibition on development and testing of futuristic ABM technologies. In his view, the record showed that the Soviets had insisted on flexibility in Agreed Statement D. Other officials who shared Judge Sofaer’s view of the negotiating record were Paul Nitze, Senator Pete Wilson (R. Ca), Senator Arlen Specter (R. Pa), Secretary of State George Shultz and Senator Strom Thurmond (R. S.C.). However, the negotiators presented the treaty to the Senate for advice and consent as though it was narrow and restrictive. (Shultz 1993, 579)

The Senate drew two important conclusions, confirmed by the negotiators’ testimony, from this presentation. The first was that the Soviets, by accepting the limitations on strategic ballistic missile defenses, had subscribed to the institutionalization of the concept of offense-based deterrence in the form of MAD. There are many who believe, however, that the very reason that the Soviets insisted on flexibility in Agreed Statement D was precisely because they did not subscribe to offense-based deterrence and MAD. Indeed, many observers contend that the Soviets insisted on flexibility

in Agreed Statement D because they were dissatisfied with the then current reliance on nuclear-tipped interceptors in ABM systems. By negotiating a "broad" Agreed Statement D, these observers argue, the Soviets believed they could give themselves an opportunity to develop and test futuristic technologies to replace the reliance on nuclear-tipped interceptors. At the same time, by agreeing to a prohibition on deployment of these future systems, they could ensure the United States could not field a futuristic system before they did. (Interview in Washington, D.C. 14 June 1995) One indicator of the Soviet rejection of the MAD concept was Moscow's refusal during the SALT I negotiations to link offensive and defensive arms limits. (Baucom 1992, 63)

2. MAD and Soviet Strategic Doctrine

Some Cold War observers believed that the Soviets never accepted the MAD concept because it was opposed to Soviet, and possible even Russian, strategic culture. Stephen J. Cimbala, in his introduction to the 1987 book he edited, The Technology, Strategy, and Politics of SDI, cites Richard Thomas, the Director of the Center for Strategic Technology, Texas A&M university, as stating that:

Intrinsic to Soviet military doctrine is the notion of damage limitation, which can be accomplished by active and passive defenses, together with very competent strategic offensive forces appropriately tasked. (Cimbala 1987, 8)

Thomas focused on the Soviet interest in active defense, including traditional air defenses and ballistic missile defenses, as well as space-based defenses. "The USSR, for its part, has never accepted the doctrine of mutual assured destruction but has historically acted on the assumption that offensive weapons, however formidable, can be countered," (Cimbala, ed. 1987, 8)

The Soviets' position in this regard was heavily influenced by their experiences in the twentieth century, which included sixty million deaths as a result of wars (twenty million during World War II alone), famine and political upheaval. As a result, Soviet leaders tended to view "conflict and violence as natural regulators of all human affairs." (Baucom 1992, 82) Even after the advent of nuclear weapons, the Soviets continued to believe that nuclear war was not suicidal and could not be ruled out as an extension of politics by other means: strong defenses would play a critical role in ensuring that such a war was terminated on favorable terms. The Soviet experience differed

greatly from that of the United States, which has experienced fewer than three million deaths in all of its wars since 1775 and has never experienced famine or political purges.

3. The ABM Treaty and Strategic Arms Control

The second conclusion that the Senate drew from the negotiators' presentation of the treaty was that America's security would be enhanced if strategic ballistic missile defenses were strictly limited. This conclusion followed from the belief that the Soviets had subscribed to MAD. Senator Joseph Biden (D. De) characterized the Senate's understanding of the ABM Treaty's arms control function in the 1987 Senate hearings on the "ABM Treaty and the Constitution" as follows:

...it was a carefully calculated means of protecting our national security by preventing a spiraling competition in nuclear weapons and by providing the foundation for reduction in those nuclear weapons. (Biden cited in Joint Hearings on the "ABM Treaty and the Constitution" 1987, 3)

However, history shows that the ABM Treaty did not prevent the Soviets from engaging in a offensive arms buildup. In fact, the post-1972 Soviet buildup vastly exceeded U.S. forecasts. Henry Kissinger has written that:

Instead of halting once they reached parity with us, as some expected, the Soviets continued to build - until stopped by the 1972 SALT accords, and then they switched to an energetic qualitative improvement. (Kissinger 1979, 197)

By 1979, only 7 years after the treaty's ratification, the Soviets had tripled the number of strategic warheads in their arsenal while the U.S. had maintained a relatively constant strategic force level. (Baucom 1992, 116) In the view of many observers, by 1980 the Soviets had achieved a theoretical "first strike" capability against the United States that could destroy up to 90% of the Minuteman III ICBM force, thus posing a serious threat to the land-based leg of the U.S. Strategic Triad. (Baucom 1992, 85, 86)

This increase in Soviet strategic capability was manifested in several advances made during the 1970s. By 1980, the Soviets had built a total strategic throw-weight of 10-12 million pounds against a total U.S. strategic throw-weight of approximately 2 million pounds, and had achieved an

impressive hard-target kill capability with the development of the SS-17, SS-18 and SS-19 ICBMs and the development of a .1 nautical mile circular error probable (CEP) for the warheads on the SS-18 ICBM. Henry Kissinger, in White House Years, stated the following with respect to these Soviet advances:

American planners in the Fifties and Sixties consistently underestimated the Soviet buildup. The Soviet programs always were at the highest level of our estimates - not what was described as most probable but what was put forward as the worst case. (Kissinger 1979, 197)

Although the Soviets had not exceeded the total numerical limits on strategic delivery vehicles set in SALT I, they had rapidly achieved a theoretical first strike capability against U.S. ICBMs that the U.S. leadership had not expected them to achieve for another ten years (Baucom 1992, 86), and they showed no signs of stopping their buildup.

4. Senate Hearings on the ABM Treaty and the Constitution

The Senate hearings on the "ABM Treaty and the Constitution," held on March 11 and 26 and April 29, 1987, did not deal with the performance of the ABM Treaty in contributing to the institutionalization of MAD, constraining the Soviet offensive arms buildup or maintaining the Cold War peace. Rather, the hearings dealt with the domestic political controversy surrounding the permissibility of the development and testing of SDI systems and the Reagan administration's interpretation of the ABM Treaty. The Senate's main concern was the protection of its constitutional authority regarding the nation's treaty-making process.

In Senator Sam Nunn's (D. Ga) view, the president "could not unilaterally change the meaning of a treaty as presented to the Senate, regardless of what the treaty itself said. The Senate's constitutional role and prerogatives were involved." (Shultz 1993, 884) Among the Senators involved in the hearings who had reviewed the actual treaty negotiating record, there was agreement that the Soviets had subscribed to a "broad" rather than a "narrow" interpretation of Agreed Statement D. These Senators also believed that the declassification of the record would be beneficial. However, in 1972, the Senate was told by the ABM Treaty negotiators that the Soviets had subscribed to the "narrow" interpretation of Agreed Statement D. In spite of the agreement among

Senators on the content of the negotiating record, the Reagan administration's critics in the Senate contended that constitutionally, the meaning of the treaty was what the Senate understood it to be in 1972 based on the presentations by the negotiators and other executive branch testimony, during the hearing on the treaty's ratification. The opposing view to this argument was stated by Senator Pete Wilson (R. Ca.)

The ratification record cannot serve as a competent basis for altering the clear meaning of the negotiating record. It cannot add new duties for the parties to perform when the negotiating record makes clear that one of the parties expressly rejected them, as did the Soviets repeatedly in refusing to agree to the U.S.-proposed ban on future ABM technologies. (Wilson cited in, Joint Hearings on the "ABM Treaty and the Constitution," 1987, 34)

Wilson went on to state that:

The Senate may bind the United States unilaterally insofar as we see fit to do so. We may not bind the Soviet Union or any other party to a treaty to something to which they did not agree. (Wilson cited in, Joint Hearings on the "ABM Treaty and the Constitution," 1987, 37)

Senator Wilson's statements point out a serious issue regarding the ABM Treaty. If the negotiators and the State department misrepresented the Treaty to the Senate during the ratification hearings, causing the Senators to believe that the Soviets had agreed to restrictions and strategic deterrence concepts that they in actuality did not agree to, the question of "What the treaty's ratification and compliance really meant for United States security?" must be asked. The 1987 Senate hearings adjourned without answering this question. Indeed, the hearings were not supposed to address this question.

The hearings ended with a Senate Resolution asserting the power of the Senate in exercising its constitutionally mandated authority to give advice and consent to treaties negotiated by the executive branch. The heart of this resolution was articulated in section 8, paragraph 1, of Senate Resolution 167 of the 100th Congress:

Under the Constitution, a treaty made by the United States is a treaty to which the Senate advised and consented, and is properly interpreted by reference to the text placed before the Senate, subject to any relevant and material executive communications to the Senate during its consideration of the treaty and any interpretation expressed by the Senate in advising and consenting to ratification.

The Senate was sending an emphatic message to the executive branch. Since the negotiating record of treaties is secret, and it is the prerogative of the executive to not present it to the Senate during the ratification process, the executive could conceivably misrepresent a treaty to the Senate during ratification hearings. However, the treaty will mean what the Senate understands it to mean based on the executive's description of it in testimony to the Senate. If ratified, the executive will be constitutionally obligated to enforce the treaty based on the Senate's understanding. If the executive, at a later date, wishes to change the Senate's understanding of the nation's obligations under the treaty - even if the changes are to return to the actual obligations as set forth in the negotiating record but differ from what was presented to the Senate during the ratification hearings - then the executive will have to present formal amendments to the Senate for advice and consent.

5. The Jay Treaty and the SDI Debate

The Senate based its 1987 position concerning the secrecy of the negotiating record on the precedent set by President Washington concerning the Jay Treaty with England in 1796. The Senate gave its advice and consent to the treaty and President Washington ratified it. However, a strong faction in the House of Representatives opposed the treaty. On a 62-37 vote, the House demanded that the president "turn over all papers, omitting only those that would embarrass current foreign negotiations, which might throw light on the treaty or how it had been negotiated." (Flexner 1974, 343) The House contended that it had the right to reconsider treaties: "...the Senate might ratify a treaty, but only the people's chamber could implement one." (Smith 1993, 259)

President Washington refused to comply with this demand, believing that "the real question was not the Jay Treaty but whether the House could increase its power" (Flexner 1974, 344) beyond that which was given to it by the Constitution. In the abridgement of his four volume biography of Washington, Washington, The Indispensable Man, James Thomas Flexner writes that:

In Washington's view, the only part of the legislative branch that shared in the treaty-making function was the Senate. If the House were permitted to sabotage the Jay Treaty after it had constitutionally become the law of the land, the wound with England would be reopened without there being any constitutional way of closing it - or, indeed, of making any treaty that the executive could in good conscience ratify or a foreign power accept. (Flexner 1974, 344)

Thus, the precedent Washington set in refusing to submit to the House's demands had nothing to do with the Senate, whose role in the treaty-making process is clearly stated in the Constitution. Arguably, the Senate could and should be privy to treaty negotiating records during treaty ratification hearings. Was the apparent misrepresentation of the ABM Treaty to the Senate in 1972 made possible by a misapplication of the precedent set by President Washington concerning the Jay Treaty of 1796?

Although the 1987 resolution rightfully reaffirmed the Senate's constitutional authority with respect to the treaty-making function, it did not address the fundamental question arising from the ABM Treaty debate precipitated by President Reagan's Strategic Defense Initiative: "What was the continued value of the ABM Treaty for the security interests of the United States?" As a result, the debate over the ABM Treaty and efforts to develop U.S. missile defenses remains constrained by what might arguably be a polarized debate grounded in Cold War paradigms of those who support MAD - on one side - and those who hold MAD morally reprehensible - on the other.

C. THE MISSILE DEFENSE ACT OF 1991 AND THE CURRENT TMD DEBATE

The Missile Defense Act of 1991 was passed in the wake of the 1990-1991 Gulf War. It mandated that the United States develop viable ballistic missile defenses for use on the national level - National Missile Defense (NMD) - and on the theater level - Theater Missile Defense (TMD). Specifically, this legislation urged the president to pursue immediate discussion with the Soviet Union on the feasibility and mutual interests of amendments to the ABM Treaty to permit the following:

(A) Construction of anti-ballistic missile sites and deployment of ground-based ballistic missile interceptors in addition to those currently permitted under the ABM Treaty.

(B) Increased use of space-based sensors for direct battle management.

(C) Clarification of what development and testing of space-based missile defenses is permissible under the ABM Treaty.

(D) Increased flexibility for technology development of advanced ballistic missile defenses.

(E) Clarification of the distinctions for the purposes of the ABM Treaty between theater missile defenses and anti-ballistic missile defenses including interceptors and radars. (Missile Defense Act of 1991 Part C, Sect 233, Para c)

The Missile Defense Act of 1995, which will supercede the Missile Defense Act of 1991 upon being signed into law by the president, also co-mingles NMD and TMD in the same piece of legislation.

Some observers might argue that it is unfortunate that these single pieces of legislation include such co-mingled direction on both NMD and TMD because NMD is clearly regulated under the ABM Treaty while TMD is not. (Graybeal and McFate 1994, 235) Such observers might also point out that this difference makes the post-Cold War TMD debate very different from the Cold War SDI debate before it.

The Cold War SDI debate, however, has arguably spilled over into the current post-Cold War TMD program in two ways. First, NMD proponents who have “traditionally sought to refute what came to be known as mutual assured destruction” seem to often “piggy-back” their agenda NMD onto the current acceptability of TMD. The original version of the Missile Defense Act of 1995, included language directing the Secretary of Defense “to deploy at the earliest practical date a national missile defense (NMD) system that is capable of providing highly effective defense of the United States against limited ballistic missile attacks.” (Draft of Missile Defense Act of 1995, Subtitle C, Section 231, Subpara 2) Arguably, including both NMD and TMD in this manner in the same legislation might imply that TMD is merely a “stepping stone” towards NMD. Additionally, the fact that the BMDO “encompasses theater missile defenses, national missile defenses, and a follow-on

research program on more advanced BMD technologies,” (Graybeal and McFate 1994, 229) further co-mingles ABM Treaty regulated programs and programs that do not fall under its auspices. All of this might be confusing as well as detrimental to the TMD program because in terms of the ABM Treaty, NMD and TMD are completely different: NMD being strictly regulated while TMD is not regulated. (Graybeal and McFate 1994, 235)

In contrast to the opponents of the ABM Treaty, the treaty’s supporters have responded to the treaty’s opponents largely by framing their argument against TMD in terms of their traditional desire to “cement the principle of joint annihilation as a cornerstone of arms control,” continuing into the post-Cold War world. (Krepon 1995, 19, 20) Thus, one might discern that supporters and opponents of the ABM Treaty have “polarized” themselves on Cold War oriented zero-sum arguments that are predicated on the belief that there is no middle ground between support for the ABM Treaty and support for TMD.

When the Clinton Administration took office in January 1993, it reoriented the missile defense program to place primary emphasis on developing TMD for U.S. expeditionary forces and secondary emphasis on developing a national missile defense capability. This action was consistent with the Missile Defense Act of 1991, then in effect. Because NMD and TMD are completely different programs with respect to the ABM Treaty, as discussed above, this discussion centers on TMD as the central theme of this paper.

The Clinton administration’s TMD program has two levels: the “core” systems package and the “advanced” systems package. To proceed with development and testing of these systems, the administration in November 1993 - as “urged” by the Missile Defense Act of 1991 - submitted a proposal to the SCC in Geneva that would “clarify the ABM Treaty by establishing a demarcation line, based on technical performance characteristics, to distinguish between defenses against long-range strategic ballistic missiles, which are constrained by the agreement, and defenses against shorter-range theater (or tactical) missiles which are not.” (Mendelsohn 1994, 65)

According to published reports, there are three basic elements of the Clinton proposal to “clarify” the ABM Treaty. First, the administration wants to define a strategic ballistic missile as one that travels faster than 5km/sec. Therefore, any missile defense system that is capable of engaging a missile with a speed of 5km/sec or less would be classified as a theater ballistic missile defense

system and ABM Treaty-compliant. The second element of the administration's proposal is to remove any altitude limitation on a ballistic missile defense system. The third element of the Clinton proposal is to drop the "inherent" capability criterion as a measure of whether a weapon system is treaty-compliant and replace it with a "demonstrated" capability criterion. In other words, systems may be deployed that have an inherent capability in excess of what is allowed by the treaty, but as long as the system is never tested or used to the full extent of its capability, it would be permissible in terms of the treaty. Arguably, this position is not inconsistent with the ABM Treaty. According to Ambassador Sidney Graybeal, the Alternate Executive Officer of the U.S. SALT I delegation, "The treaty is verified by national technical means (NTM) alone." (Graybeal testimony before the Senate Armed Services Committee, 4 May 1995) "Thus, the verifiable means of determining whether a party has given non-ABM components an ABM capability is by actual tests in an ABM mode, which can be monitored by NTM." (Graybeal and McFate 1994, 238) Therefore, the only treaty-compliant method of verifying whether a TMD system has an ABM capability, is to observe such a capability being exercised through NTM; not through computer simulation.

The debate on this Clinton proposal has involved the most heated discussions regarding BMD since the debate on President Reagan's SDI proposal a decade ago. The Senate is split between those, including Senator Nunn (D. Ga), who consider the proposal an effort by the administration to "sneak" by a substantial change in the meaning of the treaty without Senate advice and consent to a formal amendment - reminiscent of the political factors in the 1987 joint hearings - and those who oppose any formal demarcation between strategic and tactical ballistic missiles being codified with Russia. (Interview with Senate Staffer, 15 February 1995) Additionally, the arms control advocates and ABM Treaty supporters believe this proposal would jeopardize "further reductions in strategic nuclear warheads below START II levels and might even complicate implementation of this as-yet-ratified agreement." (Arms Control Today June 1994, 23) Opponents of the Clinton TMD program within the arms control community argue that many of the TMD systems tested under the [Clinton] proposal would have capabilities against strategic systems and would thus "effectively eliminate the ABM Treaty as a mechanism for preventing the deployment of territorial defense against strategic missiles." (Arms Control Today June 1994, 23)

Supporters of the Clinton proposal view it as a "safe middle ground" that would legally permit the development and deployment of TMD systems while preserving the integrity of the ABM Treaty with regard to strategic ballistic missile defenses. Additionally, the supporters of the Clinton proposal might also argue that for many years the U.S. has "dumbed down" its TMD options to make sure there was no risk of being accused of violating the ABM Treaty. The Patriot air defense system is an example of a system that was purposely "dumbed down" from its original design capability. Indeed, as pointed in Chapter I, the 2km/sec component of the "Foster Box" was selected as a benchmark for the speed of the Patriot missile so it would be certain to be treaty-compliant. Additionally, the radar and software of the system was "dumbed down" to ensure that treaty compliance was met. With this in mind, supporters of the demarcation negotiations might reason that such an approach to seek a clear delineation between strategic and tactical ballistic missiles might permit more robust TMD systems.

Still other observers speculate that the purpose of the proposal might be to avoid the domestic and international political consequences of withdrawing from the ABM Treaty. In the eyes of many observers who oppose the Clinton TMD program, the debate surrounding it, like the SDI debate before it, revolves around the treaty-compliance of these systems. The controversy over Agreed Statement D aside, it is arguable that if SDI had been deployed unilaterally by the United States, it likely would have been a violation of the ABM Treaty given the capability against strategic ballistic missiles it would have encompassed. However, the TMD systems currently under development, do not constitute the capabilities of SDI for two reasons. First, SDI relied heavily on space-based interceptors to provide the impermeable missile shield that President Reagan envisioned. These interceptors would have theoretically allowed the destruction of any Soviet strategic ballistic missile that was launched. By contrast, the current U.S. TMD program is prohibited by law from including any space-based interceptors or even ground or space-based directed energy weapons. (Missile Defense Act of 1995, Section 234, Subpara b)

Second, the TMD systems being developed are designed against the TBM threat that includes ballistic missiles with ranges up to and including 3,500 km. (O'Neill 1995, 26) Such missiles have a maximum reentry velocity of approximately 5 km/sec. (Hildreth 1994, 10) Additionally, these missiles are not of the sophistication of the Russian ICBMs and SLBMs. By contrast, modern

Russian strategic ballistic missiles that will comprise the Russian ICBM and SLBM force under START II have ranges in excess of 7,600 km and reentry velocities of approximately 7-8 km/sec (Hildreth 1994, 10 and Ballistic Missile Proliferation: An Emerging Threat 1992, 55) and are equipped with sophisticated countermeasures that enhance their survivability. Indeed, both THAAD and Navy Upper Tier TMD systems have been determined not to have a capability against modern Russian strategic ballistic missiles simply because their interceptors are not fast enough to intercept such ballistic missiles or their warheads. (Interviews at BMDO, 13 June 1995)

Thus, the Cold War argument against SDI - that it had a significant capability against Soviet ICBMs and SLBMs - cannot readily be applied to the current post-Cold War TMD systems under development. The argument of ABM Treaty supporters such as the Arms Control Association, that THAAD and Navy Upper Tier have residual capability to destroy strategic ballistic missiles (Pike and Corbin 1995, 5) may not be completely applicable to this debate. These assessments are based on computer simulation. According to Ambassador Sidney Graybeal, the only method of verification of the provisions of the ABM Treaty is by national technical means, therefore computer simulations of TMD system capabilities are not valid. (Graybeal testimony before the Senate Armed Services Committee, 4 May 1995, 3) One might also counter this "inherent capability" argument against TMD with the analogy that it is theoretically possible to shoot down an F-16 with a pistol; however, such an occurrence would not make that pistol an anti-aircraft weapon that has a consistently reliable capability against high performance jet aircraft.

Given the domestic debates concerning the ABM Treaty caused by the SDI in the 1980s and the Clinton TMD program in the 1990s, the national security utility of the ABM Treaty should be assessed in light of what it accomplished and what it did not accomplish.

D. THE NATIONAL SECURITY UTILITY OF THE ABM TREATY

The ABM Treaty did not restrain the Soviet Union in the offensive arms race. The Soviets had achieved a theoretical first strike capability against U.S. ICBMs by 1980, while the U.S. strategic arsenal remained at quantitatively constant 1972 levels. As a result of the Soviet strategic buildup the ABM Treaty also did not achieve another of its "advertised" purposes of institutionalizing the

concept of MAD. On February 18, 1970, President Nixon, in his foreign policy message to Congress, stated the following:

Should a President, in the event of a nuclear attack, be left with the single option of ordering the mass destruction of enemy civilians, in the face of the certainty that it would be followed by the mass slaughter of Americans? Should the concept of assured destruction be narrowly defined and should it be the only measure of our ability to deter the variety of threats we may face? (Nixon cited in Cimbala 1987, 14)

Clearly, President Nixon had reservations about MAD. Yet this statement to Congress reflects a disparity with what was presented to the Senate regarding MAD's relationship to the ABM Treaty during the treaty's ratification hearings. As a result from his dissatisfaction with the nuclear options offered by MAD, Nixon directed that a series of studies be initiated concerning expanding the nuclear targeting options available to the President for dealing with a crisis. Interestingly, Nixon's Secretary of Defense, James Schlesinger, reached conclusions that paralleled those reached by Robert McNamara in 1962.

In January 1974, less than two years after the ABM Treaty was ratified, Secretary Schlesinger announced a change in U.S. strategic targeting strategy - a change that stemmed from the Nixon initiated studies - that was a clear departure from the "institutionalized" concept of MAD as presented to the Senate during the ABM Treaty ratification hearings. In announcing this policy, Schlesinger declared that assured destruction and the old policy of initiating a strike/counterstrike against enemy cities "were no longer adequate for deterrence." (Cimbala 1987, 14) Schlesinger recommended a set of selective nuclear options against different sets of targets on a much more limited and flexible scale than mutual assured destruction. Within this policy, targets were divided into four principal groups:

1. Soviet nuclear forces
2. Soviet conventional military forces
3. Military and political leadership targets
4. Economic and industrial targets (including transportation and energy)

Of these four categories, only two, leadership and economic targets, were associated with MAD, and many of those (dams, rail junctions, leadership bunkers) were located outside major population centers. (Cimbala 1987, 15)

To support this targeting policy, changes were made to the U.S. war fighting plans that further divided these four groups into specific categories and offered even more strike options to the president, and thus moved U.S. strategy even further away from MAD. "By adopting this strategy of limited nuclear options, planners reasoned, escalation might be averted short of attacking target categories in major urban-industrial centers." (Cimbala 1987, 15) This strategy was continued and further refined under the Ford, Carter, Reagan and Bush administrations.

Thus it can be argued that MAD's relationship to the ABM Treaty has been somewhat dubious from the outset. The concept was never accepted by the Soviet Union nor, in actuality, by the United States. However, the ABM Treaty negotiators presented it during the ratification hearings as a "panacea" that would provide a peaceful world. Yet, many current ABM Treaty supporters continue to promote the treaty in this manner in the post-Cold War world.

Yet another stated purpose of the ABM Treaty, one that arguably was not fulfilled, was to contribute to the creation of an environment that would facilitate further strategic arms limitation and reduction negotiations and ultimately nuclear and even general and complete disarmament. It is arguable that this purpose was also not fulfilled by the treaty since the most sweeping strategic arms reduction agreements between the Soviet Union and the United States (the INF and START treaties) were agreed to under the shadow of President Reagan's insistence that SDI was not a bargaining chip and would be deployed when feasible - in the case of INF - and under the auspices of President Bush's proposal for Russian participation in the Global Protection Against Limited Strikes (GPALS) missile defense program - in the case of START I and the yet-to-be ratified START II. Concerning the issue of general and complete disarmament, it was probably not a reasonable goal in light of world history prior to 1972. The increased levels of world instability and violence since the end of the bipolar world of the Cold War make its realization doubtful in the foreseeable future.

Having analyzed what the ABM Treaty arguably did not accomplish, it is appropriate to discuss what it did accomplish and why. The ABM Treaty limited the deployment of strategic ballistic missile defense systems to those permitted in Article III of the treaty and thus prevented a

defensive arms race and theoretically, a potentially greater buildup in offensive arsenals than did occur. For the Soviet Union, the strict limitation on the deployment of ABM systems meant that it would not have to compete with a scientifically and technologically mobilized United States in a race for defensive superiority or parity in which it was at a distinct disadvantage. Additionally, the treaty's deployment limitations meant that the Soviets could meet their strategic objective of damage limitation by ensuring that U.S. land-based strategic systems remained vulnerable.

For the United States, the treaty represented a means of avoiding large expenditures on technology that was not advanced enough to support a defense that would yield a level of effectiveness commensurate with the investment required to develop and deploy it. Indeed, Secretary McNamara concluded in 1965 that "no reasonably priced defense could reduce American casualties in a nuclear war much below eighty million. Therefore, it made no sense to invest in defenses in the mid-1960s because a better return on the dollar could be had by enhancing the ability of offensive forces to penetrate enemy defenses." (Baucom 1992, 22) Additionally, as anti-defense-spending sentiment was cresting during the "Vietnam turmoil" of 1967-1975, the ABM Treaty provided a low-cost means for the Nixon administration to maintain the effectiveness of the U.S. strategic force by ensuring that the Soviets accepted limits on their deployment of strategic ballistic missile defense systems.

Thus the major domestic impact of the ABM Treaty was not that it improved U.S. security per-se during the Cold War or acted as a restraint on offensive strategic arms competition. Rather, the treaty mainly served a domestic-political economic security function by rationalizing decisions to limit investments in BMD. In other words, it "saved" a large amount of money that might otherwise have been expended on ballistic missile defenses.

However, the 1980s gave birth to new technologies that caused a rethinking of the technology vs cost limitations of missile defenses. The development of kinetic-kill warheads has made effective and affordable TMD possible through direct impact kills on ballistic missiles, thus alleviating the dependence on nuclear-tipped interceptors for proximity kills. (Baucom 1992, 113) With the continued development of new technologies such as these and the resulting equalization of the cost vs effectiveness ratio, could assessments of the domestic security utility of the ABM Treaty in the post-Cold War world be modified?

IV THE INTERNATIONAL SIGNIFICANCE OF THE ABM TREATY

Although the ABM Treaty is a bilateral agreement between the United States and Russia, it has influenced the policies of several other countries. Therefore, the parties to the treaty cannot prudently consider any changes in its dispositions without also taking into account the international understanding of its content and its accepted role in international nuclear relationships. The views of the United Kingdom, France and China - as the world's other three acknowledged nuclear powers - deserve particular attention. These countries' unique relations with the United States, both past and present, dictate that their views regarding the ABM Treaty be considered at the highest levels.

Britain, France and China are significant in any discussion concerning the ABM Treaty for two reasons. First, - aside from the United States and Russia - these countries possess the only other declared independent nuclear deterrents in the world. Since the inception of the ABM Treaty in 1972, the employment strategy, size and capabilities of these deterrents have been influenced by the existence of the ABM Treaty.

Second, these countries are significant to any ABM Treaty deliberation because the prospect of changes to the treaty would introduce new variables into their security calculations. These new variables might convince them that it is no longer practical and within their national means to maintain credible deterrent forces. Alternatively, they might choose to expand their investments in penetration aids and other means of overcoming BMD and/or in non-ballistic means of delivering nuclear weapons.

Although the reactions of these countries to changes in the ABM Treaty or U.S. withdrawal from the treaty cannot be predicted with certainty, arguably at the heart of any analysis concerning their possible reactions should be the impact that those changes might have on their relationships with the United States and how U.S. security interests might be affected as a result. The United Kingdom and France have during the twentieth century been strong allies of the United States in a number of major conflicts. However, the SDI debate of the 1980s showed that the ABM Treaty could be an issue causing significant tension in U.S.-British and U.S.-French relations. China's relationship with the United States has been turbulent for decades. Since the end of the Cold War, many Americans have seen China as a competitor and, at worst, a possible future adversary. However, in the post-

Cold War world, as the United States is faced with maintaining wide-ranging commitments with dwindling resources and as these countries seek to make security adjustments to compensate for either real or perceived U.S. withdrawal from global commitments, it is conceivable that they might seek greater autonomy - in the cases of Britain and France - or greater advantage in pursuing interests contrary to those of the United States - in the case of China.

A. BRITISH POST-COLD WAR STAKES IN THE ABM TREATY

During the SDI debate in the 1980s, British concerns about the Reagan plan for strategic defenses centered around three main issues: the integrity and effectiveness of the British independent nuclear deterrent force; the possibility for instability in the relationship with the Soviet Union during the transition from offense-based to defense-based deterrence; and finally, the possibility for the emergence of a "fortress America" mentality that might cause a reduced commitment on the part of the United States to Europe. With these concerns in mind, Prime Minister Thatcher reached agreements with President Reagan on four principles in December 1984. These principles were that defensive and offensive superiority was not the primary purpose of SDI; that the primary purpose of SDI was the enhancement of deterrence; that any deployment of SDI systems would be a matter of close consultation between NATO and the Soviet Union; and that serious negotiations with the Soviet Union would continue to be pursued on reductions in offensive armaments. (Hughes 1990, 12)

In spite of the assurances provided in the agreement reached between Mrs. Thatcher and Mr. Reagan, the British Government has long regarded the ABM Treaty as the most important means to influence any U.S. decisions to deploy ballistic missile defenses. According to Robert C. Hughes,

In the U.K.'s view, the ABM Treaty commonly understood, clearly not the new interpretation [announced by the Reagan administration in 1985], prohibited development and deployment of any ABM system other than the fixed, land-based system at the one site allowed for each superpower. (Hughes 1990, 45)

Hughes adds that British leaders "have not shared President Reagan's vision of a world free of nuclear weapons." (Hughes 1990, 135) In the assessment of some observers of British defense issues, even in the post-Cold War world, the position of the U.K. Government, whether the

Conservative or the Labor party has a majority in the House of Commons, is that the British independent nuclear deterrent is non-negotiable and that the deterrent continues to play a role in maintaining the peace in a world in which the presence of nuclear weapons, in friendly as well as unfriendly hands, will remain a reality for the indefinite future. (Interview with British Defense Analyst, February 2, 1995) Indeed, in the opinion of Robert C. Hughes, for the most part, the British believe that "the existence of nuclear weapons, and little else, is what has deterred war in Europe since World War II." (Hughes 1990, 135) It can be inferred that the British believed during the Cold War that the ABM Treaty played a critical role: it ensured the continued effectiveness of nuclear weapons in deterring war by strictly limiting defenses against strategic ballistic missiles.

1. British Post-Cold War Security Interests and Perceived Threats to those Interests

The 1995 White Paper on British defense states:

The goal of our security policy is to maintain the freedom and territorial integrity of the United Kingdom and its Dependent Territories, and the ability to pursue our legitimate interests at home and abroad. (Statement on the Defence Estimates 1995: Stable Forces in a Strong Britain, 9)

The British look at threats to these interests on two different levels: the strategic and the substrategic. On the strategic level, the British see the need to maintain a "hedge" against Russia in the event that political reforms fail and Russia assumes an aggressive posture in Europe. The 1995 British defense White Paper states:

We cannot, however, yet be certain that reform will succeed. The gravest challenge to our security and that of our allies would be the reemergence of a major external threat to our territorial integrity or that of our allies, or to our vital interests. We believe the prospect of that to be extremely remote. It would, however, be imprudent to write off entirely the possibility that a strategic threat could re-emerge. Even after full implementation of the Strategic Arms Reduction Treaties, and other nuclear arms control agreements, Russia will still possess an immense nuclear arsenal. It will also retain large conventional military forces; and its political, economic and social evolution will spread over the next decade and beyond. (Statement on the Defence Estimates 1995: Stable Forces in a Strong Britain, 19)

On the substrategic level, Britain sees an emerging threat in the turmoil caused in many parts of the world by the end of the ideologically oriented bi-polar confrontation of the Cold War.

The removal of the constraints imposed for nearly half a century by the structure of ideological confrontation has resulted in civil war, cross-border conflict and the collapse of economic links in Europe and elsewhere. The previous low risk of global war has as a result been replaced by a greater risk of smaller-scale conflict and suffering, spawned by the instability present in many parts of the world, exacerbated in many cases by resource and economic pressures. (Statement on the Defence Estimates 1995: Stable Forces in a Strong Britain, 23)

Like the United States, Britain also sees an element that further defines and complicates the emerging threat described above: the proliferation of WMD and missile systems by which they can be delivered.

Regional instability may be compounded by the proliferation of nuclear, chemical and biological weapons and the means of their delivery which we, with our allies, have identified as being a major security concern. Our current assessment is that some dozen countries of concern have or are developing such weapons; most also have ballistic missile programmes. (Statement on the Defence Estimates 1995: Stable Forces in a Strong Britain, 25)

The British White Paper goes on to state that:

The proliferation of weapons of mass destruction and the means of their delivery will continue to be a major security concern for the United Kingdom and our partners. (Statement on the Defence Estimates 1995: Stable Forces in a Strong Britain, 26)

2. The Role of the Nuclear Deterrent in Supporting British Security Interests

It appears that there might be consensus that the British independent nuclear deterrent still has a central role to play in the support of post-Cold War British security interests and the deterrence of threats to those interests on both the strategic and substrategic levels. In the view of some, this role makes the ABM Treaty highly relevant today given that "British nuclear capability will be vested solely in the new Trident [strategic ballistic missile] force once the residual WE-177 [nuclear gravity bomb] stockpile reaches the end of its service life in the first decade of the new century." (Witney 1995, 98) The current White Paper on British defense states:

We will continue to provide for the maintenance of an independent national nuclear deterrent for as long as is necessary for our security. But this deterrent will be deployed at a minimum level which reflects that evolving strategic setting. We have long made clear that we will not use the full capacity of the Trident missile system. On the basis of our current assessment of our minimum deterrent needs, each Trident submarine will deploy with no more than 96 warheads, and may carry significantly fewer. Furthermore, we also intend to exploit the flexibility Trident offers for both the strategic and sub-strategic elements of our deterrent, thus allowing the withdrawal without direct replacement of the WE177 free-fall bomb by the end of 1998. (Statement on the Defence Estimates 1995: Stable Forces in a Strong Britain, 33)

Additional evidence of the British Government's support for a credible nuclear deterrent is given by Nicholas K. J. Witney, an official of the U.K. Ministry of Defence. He asserts that the British Government supports the proposition that even after the Cold War, "nuclear weapons make a unique contribution in rendering the risks of any aggression incalculable and unacceptable [and thus] remain essential to preserve peace." (Witney 1995, 100)

3. British View of the ABM Treaty in the Post-Cold War World

It is clear that the British would prefer that the integrity of the ABM Treaty be maintained. However, since they are not a party to the treaty, they realize that any final decision regarding the disposition of the treaty will be between the United States and Russia. In this light, one might expect the U.K. to adapt to a modification or a withdrawal if such an event transpires. However, the early stages of the British debate on TMD and its possible impact on the ABM Treaty reflect a policy towards the ABM Treaty that U.S. policy-makers might do well to thoroughly examine before making any decision aimed at modifying or withdrawing from the treaty.

In the mid-1990s, many British observers believe that the ABM Treaty still serves a useful purpose. They note that the "British [Government] believes that the ABM Treaty has been a success" and that it should not be abandoned. Additionally, they point out that the treaty - even in the post-Cold War world - is looked on by the British Government as a guarantor of the continued effectiveness of the U.K.'s sea-based strategic deterrent, given the large investment in the Trident D-5 program over the past decade. (Interview with British Defense Analyst, 2 February 1995)

This assessment has been corroborated by the comments of British Government officials involved in politico-military affairs. They assert that the British Government's position is to continue

to be a strong proponent of the ABM Treaty, because in its view, the treaty still provides a measure of stability in the evolving Western relationship with Russia by continuing to inject an element of predictability in defense planning afforded by the prohibition on strategic defenses and the constraints placed on Russian ABM development and deployment. (Interview with British Politico-Military Affairs Expert, 24 February 1995) Indeed, given the fiscal constraints that nearly all Western countries are contending with in the wake of the Cold War, British strategic objectives might be more difficult to obtain without the constraints imposed by the ABM Treaty. (Interview with British Politico-Military Affairs Expert, 24 February 1995)

Although the British might not openly discuss their opposition to the U.S. discussions about space-based SDI of the 1980s and early 1990s in terms of sovereignty, one might interpret the view of those observers concerning the benefit afforded by the ABM Treaty as one of predictability in defense planning to mean that there was some apprehension about a potential U.S.-Russian security condominium that might possibly impinge on British sovereign prerogatives. In the opinion of one noted expert on British defense issues, an agreement between the United States and the Russian Federation in the early 1990s on joint development and deployment of the Global Protection Against Limited Strikes (GPALS) strategic defense program came very close to being finalized. When this agreement did not come to fruition, there was a sense of relief in British Government circles. (Interview with British Defense Affairs Analyst, 2 February 1995)

From these comments, one can draw the conclusion that there is general agreement among many U.K. defense experts, both inside and outside of government, that the ABM Treaty still plays a useful role in the evolving post-Cold War security environment. On what the British might regard as the strategic level - with respect to Russia - this role might be played in three discernible ways. First, the treaty continues to provide an element of predictability in the strategic relationship as both sides reduce their strategic force levels yet continue to require assurance of the effectiveness of their remaining strategic forces. Second, by contributing to the assurance of the continued effectiveness of their reduced strategic forces, the treaty helps to prevent a renewed strategic arms competition that would put a severe strain on all economies concerned as well as have a destabilizing influence on world security. Third, the treaty continues to provide a regime for some margin of constraint on Russian development and deployment of ABM systems. On the substrategic level - with respect to

the emerging threats posed by regional conflicts and the proliferation of WMD - it is possible that the ABM Treaty might be regarded as a guarantor of the sovereign strategic prerogatives of Britain in a turbulent post-Cold War world as it seeks to deter the emerging threats to its security interests.

4. Current British Policy on TMD

To date, little has been written in Britain about its policy concerning the current debates on TMD and its relationship to the ABM Treaty. In the words of one observer of British defense affairs, "The British policy on this matter is that they don't have one." (Interview with British Defense Affairs Analyst, 2 February 1995) However, there is evidence of emerging interest in this subject in Britain.

One of the main British objections to the SDI concept - and an objection that continues to this day - is that in their view, space-based missile defenses are not sound. The official reasons for this objection are (a) technology is not yet far enough advanced to support such a defense and (b) such defenses are cost prohibitive in the fiscally constrained environment most Western nations find themselves in after the Cold War. Unofficially, however, the British are concerned that (a) such defenses would degrade the credibility of their small strategic nuclear deterrent force and (b) such defenses might give the United States a final veto on British sovereign prerogatives in responding to a threat to vital national interests - a veto cast in the interests of "world peace." (Interview with British Defense Affairs Analyst, 2 February 1995) Based on statements by some U.S. officials, such concerns may not be unfounded.

Our allies and neutral nations would benefit greatly if we had wide-area ballistic-missile defenses. For example, suppose we had the capability to share ballistic missile defenses on a global basis, say a space-based system. You could go to a country such as Israel - which I believe has nuclear weapons - and say, "If you get rid of your nuclear weapons, we'll share ballistic missile defenses with you." Or suppose we go to India and Pakistan and say, "Look, we understand that you don't like each other, we understand that you are both relying on ballistic missiles and nuclear weapons to deter one another, and that if you have a war, there is liable to be a non-rational decision which causes one or the other or both to use these weapons. The problem is, we live downwind, and we don't like it. So, while you may want to use these systems, we're not going to let you. We are going to preclude you from doing that, at least to the extent we can, with ballistic missile defenses." I think that is as important as having ballistic missile defenses for our own nation. (Horner 1994, 9)

However, the British Government has always considered ground-based or sea-based theater missile defenses as sound. (Interview with British Defense Affairs Analyst, 25 May 1995) Indeed, in 1985, the U.K. signed a memorandum of understanding with the United States in which one of the early SDI-related contracts the U.K. was to receive was for a theater missile defense architecture study of what such a system might involve. (Hughes 1990, 92) Indeed, the current White Paper on British defense states:

The United Kingdom has taken an active interest in ballistic missile defence (BMD) for many years. We collaborate on a bilateral basis with the United States and France, as well as playing a full part in the increasing volume of NATO discussion and study. Last year, we led a NATO study into possible defensive architectures for European missile defence in the post-Cold War era. Additionally, we continue to play a full part in studies tasked by the NATO Air Defence Committee, which is examining Theatre Missile Defence within the context of overall risks from attack by ballistic missiles. This work will help to define future operational requirements and also inform NATO's nonproliferation study groups. (Statement on Defence Estimates 1995: Stable Forces in a Strong Britain, 62)

Many observers of British defense policy believe that the British Government will support the U.S. TMD program as long as it is conducted within the limits of the ABM Treaty. They argue that the main concern within the U.K. about the U.S. TMD program is that it might impinge on the restrictions set by the ABM Treaty. To them, "it makes sense to establish a demarcation line in the treaty." (Interview with British Politico-Military Affairs Expert, 24 February 1995) This statement referred to the Clinton administration's proposal in the SCC to formally establish a demarcation between theater and strategic ballistic missiles in the ABM Treaty. Such arguments indicate that the British Government would prefer revision of the ABM Treaty to permit a robust TMD capability over an outright abrogation or withdrawal by the United States.

In the context of TMD in 1995, the British Government is not completely convinced that there is a ballistic missile threat to British interests significant enough to warrant a separate defense program. (Interview with British Defense Affairs Analyst, 2 May 1995) However, a prefeasibility study has been commissioned to study several TMD-related issues; including possible threats and

appropriate U.K. responses to those threats; and potential interoperability between U.S. and U.K. TMD systems. The current British White Paper states:

The aim of the study is to identify practical defensive architectures against a range of scenarios, taking account of costs, risks and timescales, as well as technical and industrial considerations. (Statement on the Defence Estimates 1995: Stable Forces in a Strong Britain, 62)

The House of Commons is tentatively scheduled to hold hearings on the findings of the prefeasibility study in the Spring of 1996, and the results of the study will be made public in June 1996. Although this action only constitutes a study at this point, some observers consider it a "watershed in acknowledgment on the part of British policy-makers of a potential threat and it is serving to focus their attention on its evaluation." (Interview with British Defense Affairs Analyst, 25 May 1995) To uninvolved observers, the conduct of such a prefeasibility study might also suggest a recognition on the part of Britain that the current TMD program in the United States is not SDI and British interests might warrant greater participation in it. Such an observation might be supported by the convening of a conference on ballistic missile defense at the Royal United Services Institute in June 1995 at which the emerging ballistic missile threat, potential responses to those threats and counter-proliferation issues were discussed. This conference was the first of its kind in the U.K. and might indicate that the TMD debate is gaining some momentum there, given the fact that the keynote address was delivered by Lt. Gen Malcolm R. O'Neill, USA, the Director of the U.S. Ballistic Missile Defense Organization. However, the pre-feasibility study and the associated development of BMD policy essentially represent the current extent of British BMD activity.

Because the British Government is currently fiscally constrained, it can be expected that its future TMD policy will be influenced heavily by the findings of the prefeasibility study. If it is determined that there is not a ballistic missile threat to British interests, one might assume that the U.K. will not invest in such a program. However, if the study finds that there is an emerging threat to British interests, then it can also be assumed that the U.K. will make the requisite investment commensurate with the threat level it believes to exist. In the opinion of some observers, a decision by the British Government to proceed with a TMD program would be spurred by the memory of

World War II, during which the British suffered over 70,000 casualties to German V-1 and V-2 missile attacks. It would also be spurred by their experience in the Falkland Islands War in which Argentine cruise missiles inflicted heavy damage on U.K. naval forces. (Interview with British Defense Affairs Analyst, 25 May 1995)

Clearly, the United States sees an emerging ballistic missile threat that needs to be countered with adequate defensive systems. (Nagler 1992, 12) The British have not yet reached this conclusion. However, they are engaged in a serious study of the issues involved and are cooperating in some types of research and development. According to one expert on British defense affairs, the conduct of the prefeasibility study and the extent of British involvement in TMD currently constitute "a significant step forward. However, final decisions on the results of the prefeasibility study and further British TMD policy will not be made until after the elections scheduled for May 1997." (Interview with British Defense Affairs Analyst, 27 October 1995) A U.S. withdrawal from the ABM Treaty at this point in the British TMD debate and analysis might give ammunition to the opponents of TMD in Britain by enabling them to portray TMD as an element of a new post-Cold War arms race, thus diverting attention from the relevant issues of the emerging ballistic missile threat. By thoroughly considering the U.K.'s concerns and viewpoints relating to TMD and the current role of the ABM Treaty, the United States might be able to adequately meet the new threat within the limits of the ABM Treaty and at the same time satisfy the concerns of Britain, thus strengthening its relationship with a valued and critical ally.

B. FRENCH POST-COLD WAR STAKES IN THE ABM TREATY

Since the creation of the Force de Frappe in the 1960s, nuclear weapons have come to symbolize French leadership and ideals in the international arena. These ideals, highly valued by the French, include national sovereignty, independence and accomplishment. Although there is a certain amount of anti-nuclear sentiment in some minor political parties in France, "in the major parties likely to form governments in the foreseeable future - the Socialist Party, the Gaullist Rassemblement pour la Republique (RPR), and the more centrist Union pour la Democratie Francaise (UDF) - very few opponents of France's nuclear deterrence posture can be found." In the words of President

Francois Mitterrand, [nuclear weapons] are the “pivot” of French strategic policy. (Yost 1994, 19-20) Arguably it is this “pivot” that has allowed France to succeed in

holding an international “rank” superior to what her population and territory would imply as objectively appropriate - through diplomacy and through scientific, technical, and economic accomplishments. (Yost, Fall 1995 Lecture)

Essentially, the current French nuclear debate - aside from the controversy over the ongoing nuclear testing being conducted by the new government of Jacques Chirac - is over the appropriate doctrine for employment of the deterrent force in the post-Cold War world, not over whether the nuclear deterrent is required. Two key aspects of this debate are (1) to what extent nuclear weapons should be adapted to an operationally usable configuration or remain weapons of “non use” and “non war,” as during the Cold War, and (2) to what extent France should build such weapons as well as active defenses to guard against the “tous azimuts” (all points of the compass) threat posed by the proliferation of WMD and ballistic missiles. However the debate is resolved, the continued “assured effectiveness” of the nuclear deterrent force will be of paramount importance to the French. This “assured effectiveness” is critical both for the French - to have confidence in the deterrent’s national security utility - and for those whom it is meant to deter. In the opinion of some observers, the French see the ABM Treaty as a guarantor of this continued “assured effectiveness.”

1. French Concerns Over SDI

During the 1980s, the French had several concerns that the U.S. SDI program - which emphasized space-based weapons - was a potential threat to the “assured effectiveness” of their deterrent. During this time, the French generally viewed the continued integrity of the ABM Treaty - Article V of which prohibits space-based ABM defenses - as the most effective answer to these concerns. However, they viewed SDI as a direct threat to the ABM Treaty. Largely to assuage French apprehensions about SDI, Secretary of State George Shultz declared at a North Atlantic Assembly meeting in San Francisco on October 14, 1985, “that the United States would abide by the so-called narrow interpretation” of the ABM Treaty in the development of SDI. (Hughes 1990, 46)

With the end of the Cold War, many French concerns about the former U.S. SDI program have been mitigated by changed circumstances. As a result, the French view the current U.S. TMD

program differently than SDI. First, during the Cold War, the French were concerned that if SDI was deployed, there would be a decrease in strategic stability during the transition from offensive-based to defensive-based deterrence and that during this transition, a defensive arms race would develop that would diminish the "assured effectiveness" of the Force de Frappe. Today, with the end of the Cold War and the emergence of a "tous azimuts" threat, the French concede that traditional concepts of deterrence may need to be seriously rethought. The Cold War concept of offensive-based deterrence may no longer apply in the post-Cold War world, especially in relation to Third World proliferants armed with WMD. Might theater missile defenses be part of a new post-Cold War strategy? The centerpiece of such a strategy might be nonproliferation of WMD reinforced by the NPT, extended deterrence, credible TMD and a discriminate nuclear retaliatory capability. Additionally, the 1980s French concern over the emergence of a defensive arms race ensuing from strategic defense efforts is no longer valid for two reasons. (a) Today's emphasis is on sea- and land-based theater defenses rather than on space-based strategic defenses. (b) Russia is not financially capable of conducting a technologically intensive arms race at present or in the near future.

Second, during the SDI debate, the French were concerned with the longstanding Gaullist fear that the United States would not risk its survival and sovereignty for its allies by attacking the Soviet homeland with massive nuclear strikes in retaliation for Soviet strikes limited to Western Europe. (Hughes 1990, 103) In essence, the French were concerned that if the United States succeeded in deploying SDI, in the event of a nuclear crisis, it would merely protect itself under its "missile shield" and let Europe fend for itself. Today, this argument does not have the significance it once did due to the new emphasis on sea- and land-based theater defenses rather than space-based national defenses and the demise of the Soviet Threat. The particular argument was, at any rate, not very logical, because it assumed that U.S. invulnerability would make the U.S. less willing to defend Europe and that a high level of vulnerability to retaliation would enhance America's determination to defend Europe.

Third, during the SDI debate, the French were concerned that the high levels of expenditures required to support SDI would have a negative impact on conventional defense readiness. However, since the end of the Cold War and the dissolution of the threat posed by the Soviet Union and its Warsaw Pact allies, Western countries have been able to reduce their standing conventional force

structures, theoretically making money available for other defense-related requirements. In practice, most Western countries have substantially reduced defense spending.

Fourth, during the SDI debate, the French were concerned that the program would cause a negative impact on the prospects for nuclear arms reductions between the superpowers. However, today, since it is theater rather than strategic missile defenses that are being emphasized, strategic arms reductions between the United States and Russia should not be hindered. In light of the fact that the INF Treaty has been fully implemented since 1988 and that START I was successfully implemented in March 1995, the arms control regime between the United States and Russia is on relatively firm ground. Additionally, the Clinton administration has publicly stated its commitment to maintaining the integrity of the ABM Treaty and any clarifications to the treaty made necessary by TMD programs are being discussed directly with the Russians in the SCC instead of being made by unilateral reinterpretation of the treaty by the United States. (Lockwood 1993, 22)

2. France's View of its Role in the World

Although these French Cold War concerns over SDI have been mitigated by new circumstances, two things have not changed. First, France still believes - in the post-Cold War world as it did during the Cold War - that it has a significant role to play in maintaining European stability and that its strategic nuclear deterrent is critical to the fulfillment of that role. In the realm of European stability, the French continue to believe that the Force de Frappe serves not only French deterrent interests but has a place in deterring threats to Western Europe in general. Specifically, "since nuclear deterrence remains the most reliable means of war-prevention in French eyes," it seems imperative to preclude any situation that would leave Germany vulnerable to nuclear coercion by a resurgent Russia or a terrorist state, or preoccupied with an apparent lack of nuclear protection in general. (Yost 1994, 57) Openly discussing Germany as a beneficiary of its nuclear "umbrella" is very significant and indicates France's seriousness about the role it sees for the Force de Frappe in Europe's future. Previously, France's "vital interests" that could "trigger a nuclear riposte were left deliberately vague." (*The Economist*, Feb 19, 1994) In the case of Germany, however, they are becoming much more specific. Such reasoning should not be alien to the United States, since the U.S. "Nuclear umbrella" over Japan is meant to serve essentially the same purpose with respect to

security and stability in Asia. (United States Security Strategy for the East Asia-Pacific Region 1995,

10) Francois Leotard stated in the 1994 French White Paper on Defense that:

Nuclear deterrence remains one of its [French defense's] foundations. France must expect its option in this matter to be always contested by others on the international level, perhaps more and more so with the end of the Soviet threat. But it cannot go back on it, for today its own independence is at stake, and tomorrow perhaps that of Europe. (Statement of Francois Leotard in the forward to the 1994 French White Paper on Defense)

The French White Paper goes on to discuss the role France sees for itself in Europe:

France's maintenance of its world rank will largely depend on its aptitude to influence the European structure and Europe's future evolutions. If France proves strong on the continent, it will speak in a firm voice everywhere else. Its success or failure in this venture may determine the role it will play in the community of nations. (1994 French White Paper on Defense, 24)

Clearly, France links its European stature to its world stature.

The second French position that has not changed with the end of the Cold War is that France retains its opposition to large-scale space-based defense, such as SDI and GPALS, and thus a high level of support for the ABM Treaty as a means of guaranteeing the continued "assured effectiveness" of its strategic nuclear deterrent. Because France remains committed to the ABM Treaty in 1995, it continues to have concerns relative to the impact of current U.S. missile defense programs on the ABM Treaty. These concerns focus on France's ability to maintain its nuclear deterrent as a credible component of its overall strategy to fulfill what it sees as its role in Europe and the world. Since France is an important ally of the United States, these concerns should be thoroughly considered by the United States in any deliberation concerning possible changes in the ABM Treaty.

3. French Apprehension About Space-Based ABM Systems

Given that there is general political agreement in France that the independent nuclear deterrent is central to the country's conception of itself as a significant and independent actor in international politics, and constitutes the "pivot" of French strategic policy, there continues to be substantial concern that a space-based missile defense system under U.S. and/or Russian auspices

could negate the credibility of the Force de Frappe as a deterrent and thus France's independence of action as a "medium" world power. Therefore, the foremost French concern related to current U.S. missile defense programs and the ABM Treaty is that the "assured effectiveness" of the Force de Frappe, as an instrument of French national policy and sovereignty, not be jeopardized in any way.

Whether Socialist or Gaullist, French leadership is in agreement on the fact that the effectiveness and credibility of the Force de Frappe must be maintained. The French see highly advanced U.S. missile defense systems encompassing space-based weapons as a threat to this effectiveness as much today as they did in the 1980s. In the view of many French leaders, a highly developed ballistic missile defense system jointly run by the United States and Russia could give them "the means to stop in mid-flight not only enemy missiles but also allied missiles, when a threat of conflict in the world would go against Washington's interests." (Yost 1994, 48) Indeed, during discussion between the Bush administration and Russia in 1992 concerning joint U.S.-Russian cooperation in the GPALS system, substantial French fears of just such a U.S.-Russian security condominium were stimulated.

French experts have questioned the reliability of unofficial U.S. assurances that the integrity of third-country deterrents, including the SLBMs in France's nuclear posture, would not be undermined by Russian participation in a jointly operated strategic defense posture. Some have expressed concern about a possible American-Russian condominium or a commanding U.S. predominance in space-based defenses. (Yost, Fall 1995 Lecture)

Because the French did not fully trust the American assurances that the joint U.S.-Russian GPALS would not degrade the integrity of the Force de Frappe, the French strongly reaffirmed their support for the ABM Treaty. (Interview with European Defense Affairs Analyst, 2 May 1995) Thus, the French have opposed robust ballistic missile defenses encompassing space-based weapons systems because such weapons could threaten French strategic autonomy and raise questions about France's capacity to compete in this domain of military activity, given the limits of French calculations of nuclear sufficiency. Such defenses could possibly force the French to spend more money on their deterrent to increase both its size and penetrating capability (Yost 1994, 47) - goals that may be beyond France's economic ability, in view of other national priorities.

The [French] goal of retaining an "ambitious but reasonable" rank could be endangered, it is feared, by the introduction of new military technologies that would be too costly for France to pursue, that would endanger the autonomy of her national decision-making within the Atlantic Alliance, or that would result in other powers (the United States, Russia, and perhaps others) totally out-classing French military means. (Yost, Fall 1995 Lecture)

4. French Post-Cold War Security Interests

France sees two major near to medium-term threats to European stability and French security interests. These threats have also been identified by the Clinton administration in U.S. policy statements such as the Nuclear Posture Review and the National Military Strategy of the United States of America 1995. These threats concern deterrence - hedging against a resurgent Russia and against emerging threats, including the proliferation of WMD.

a. Deterrence as a Hedge Against a Resurgent Russia

The French believe that the large number of nuclear weapons in the Russian arsenal is a distinct point for concern. "Aside from Russia's uncertain prospects for democratization, it is widely agreed that French forces help to prevent Western Europe from falling under Russia's political-military shadow and contribute to the maintenance of balanced relations with Russia." (Yost 1994, 25) The 1994 French defense White Paper sheds further light on this issue by stating:

In the long run, Russia will remain a strong military power in Europe, first of all because of the imposing potential it inherited from the Soviet Union, and secondly because of the historical and geopolitical background of this great country. Its defence system, which is today hypertrophic and partly in a state of crisis, is still considered as an essential attribute of its status and a warrant of its interests. The existence of an important nuclear and conventional capacity east of the continent, whatever its purpose may be, or whatever the foreign policy of the people responsible for it, must therefore be considered as a constant for the period taken into account in this White Paper. (1994 French defense White Paper, 11)

In effect, the French continue to view their nuclear deterrent as a hedge against a resurgent and potentially aggressive Russia and as an important component of maintaining the overall stability of Europe. As justification for this policy, the French point to the fact that although START I has entered into effect and the Russians have for some time been destroying ballistic missiles as observed

by international teams, they have never agreed to observation of the actual dismantlement of nuclear warheads, thus requiring the West to trust their adherence to treaty commitments. Indeed, U.S. Secretary of Defense William Perry stated during the news conference concerning the Nuclear Posture Review on September 22, 1994, that the U.S. does not know exactly at what point the Russians are in the dismantlement of their nuclear warheads. (Nuclear Posture Review Press Release 1994, 13)

b. Deterrence of Emerging Threats

There is a sense in the French leadership that a new deterrence strategy is required for the post-Soviet threats. This sense is comparable to that articulated by the following statement by Wayne Tunick:

Major powers must begin a high-priority effort to develop a comprehensive policy that includes credible post-Cold War deterrence strategies as a major element and that provide direction in the post-Cold War world. (Tunick 1995, 10)

In the “tous azimuts” framework, France sees a new threat from the “South” that may require a concept of “deterrence of the weak by the strong.” In this context, Algeria, Iran, Iraq and Libya - countries that might seek to challenge French interests and obtain WMD as one means of making that challenge - might be seen by France as potential threats. In the view of many in France, Paris needs a credible nuclear arsenal to support its future policies towards the countries of the “South.” Advocates of this point of view point out that the leaders of many of these countries cannot be relied upon to act as rationally as the East-West Cold War antagonists. The threat of nuclear destruction may not be enough to deter these countries from attacking French interests. Rather, being ready to actually respond in a direct and effective manner that may include the actual or “threatened use of ‘surgical’ nuclear strikes against small nuclear powers or terrorist states that threaten French interests” (The Economist, February 19, 1994) may be the best way to deter and influence such “non-rational” actors. Particularly in the case of Algeria, where the specter of terrorism directed against French interests, property and citizens looms large, it is felt strongly that France must not leave itself open to economic, military or even social blackmail or intimidation. Incidentally, the United States

also acknowledges the relevance of nuclear threats as a potential tool for promoting nonproliferation and for managing proliferation contingencies. The National Military Strategy of the United States of America 1995 states that:

forward deployed and deployable nonstrategic nuclear weapons, both to provide deterrent coverage over our allies, and because extended deterrence, in many cases, is a decisive factor in our nonproliferation efforts. (National Military Strategy of the United States of America 1995, 10)

The French are concerned, however, that the abrogation of the ABM Treaty and the deployment of space-based defenses might be read by the countries of the "South" as a signal of some type of new containment strategy directed against them. Such a perception, it is feared, could exacerbate geostrategic fracture lines by substituting a new "North-South" confrontation for the old "East-West" confrontation. France is also concerned that, if such a situation came about, its hands might be tied in dealing with crises arising from such a confrontation by a "superpower condominium veto" on its strategic military capability.

c. Deterrence of the Proliferation of WMD

"France cannot contemplate giving up its nuclear weapons when the prospects of nuclear proliferation in the broad region from North Africa to the Persian Gulf are substantial" (Yost 1994, 70) and neither does France want to take any action that could potentially further inflame "Southern" passions against the North. In French eyes, such an inflammation could lead to the increased proliferation of WMD to both friendly as well as unfriendly nations. French nuclear nonproliferation policy in the 1990s has essentially the same goals as U.S. nonproliferation policy.

Although France will in all likelihood retain its opposition to large-scale space-based defenses, such as GPALS, and thus a requisite level of support for the ABM Treaty, with the recent election of Jacques Chirac, it is possible that the government's "response to the proliferation of weapons of mass destruction may well give more emphasis to the development of active defenses in cooperation with allies, including the United States" (Yost 1994, 40). Prior to his election as President in May 1995, Chirac expressed support for a multi-element approach to counter-

proliferation, including a “more operational” doctrine for nuclear forces to curb proliferation and active defenses against WMD to support international agreements such as the NPT. In this regard Chirac has asked the question:

What response should be made to the appearance in these potentially hostile countries of chemical and biological weapons that we have ourselves renounced? My conviction is that the principle of nuclear deterrence remains valid in the face of proliferation, and that it even begins to apply prior to the appearance of a concrete threat, on condition that we have sufficiently diversified technical options to deal with different types of crises. (Chirac cited in Yost 1994, 80)

Indeed, the groundwork for such a policy was set in February 1994 when a defense committee in the French Parliament recommended, in conjunction with the release of the latest defense White Paper, that the French deterrent posture should be modified to include the threatened use of surgical nuclear strikes “against small nuclear powers or terrorist states that threaten French interests.” (The Economist, Feb 19, 1994, 58) In such a doctrine, “weapons with lower yields and more confined effects might be delivered with high accuracy and thus cause less collateral damage. Capabilities with greater discrimination, it is argued, would be more relevant to the more probable contingencies and would thus provide France with greater leverage” (Yost 1994, 30) in the fight against the threat posed by the proliferation of WMD. Since becoming President in May 1995, Chirac has ruled out the development of such weapons, owing in part to his decision to support the conclusion of a comprehensive test ban treaty in 1996.

Although the Clinton administration would probably be opposed to the more “operational” component of the French nonproliferation strategy, if it involved certain approaches to nuclear employment policy, in view of the administration’s declared policy represented by the NPR, the administration might see an increased opportunity for cooperation with the French in the area of TMD. Such cooperation could serve to encourage French involvement in both work and cost-sharing on the development of ballistic missile defense systems. It is noteworthy in this regard that France, Germany, Italy, and the United States signed a Statement of Intent in February 1995 regarding the development of a Medium Extended Air Defense System (MEADS), which is to have TMD capabilities.

Henri Conze, head of the French Defense Ministry's procurement agency, believes that an enhanced air defense may be critical to French defense efforts not only against ballistic missiles but also against a continuum of various air threats:

...it is no longer a question of protecting ourselves solely against the threat of ballistic missiles. Air defenses against aircraft or air-breathing missiles flying at very low altitudes are just as important, notably for our Mediterranean approaches. It is truly an enlarged air defense that we need. Together with a space-based system of surveillance and warning, it would reinforce deterrence in the face of proliferation. (Conze and Picq cited in Yost 1994, 40)

5. The Opportunity for U.S.-French Cooperation Based on Mutual Interests

In French eyes, the ABM Treaty continues to play an important role in the post-Cold War world. As in the 1980s, it continues to address several key French concerns: the integrity and sufficiency of the Force de Frappe as a hedge against a resurgent Russia; the ability of France to play a key role in maintaining European stability and to fully exercise its sovereignty in managing any eventualities in the North-South relationship without a U.S.-Russian security condominium veto; and finally the development of a post-Cold War deterrence and nonproliferation strategy that supports French national interests.

Like France, the United States has security interests that center on deterrence as a hedge against a resurgent Russia, and deterrence against emerging threats posed by the proliferation of WMD. The 1994 Nuclear Posture Review opens with three quotations from President Clinton's 1994 National Security Strategy that reflect the similarity between these U.S. and French security interests:

Even with the Cold War over, our nation must maintain military forces that are sufficient to deter diverse threats. (Clinton, National Security Strategy of the United States 1994)

We will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with access to strategic nuclear forces from acting against our vital interests and to convince it that seeking a nuclear advantage would be futile. Therefore we will continue to maintain nuclear forces of sufficient size and capability

to hold at risk a broad range of assets valued by such political and military leaders. (Clinton, National Security Strategy of the United States 1994)

A critical priority for the United States is to stem the proliferation of nuclear weapons and other weapons of mass destruction and their missile delivery systems. (Clinton, National Security Strategy of the United States 1994)

With the election of Jacques Chirac as French President, the United States is in a unique position to achieve its TMD objectives and greatly strengthen the U.S.-French relationship. President Chirac is a strong advocate of France working “with its allies in Europe and North America to build active defenses against ballistic missiles, aircraft, and other means of delivering weapons of mass destruction.” (Yost 1994, 90) The United States therefore has the opportunity to significantly pursue its TMD objectives through cooperation with an important ally. Additionally the Clinton administration has an even greater opportunity to strengthen the post-Cold War U.S.-French relationship by ensuring that the ABM Treaty is maintained and that the U.S. TMD program is conducted within its limits. This would demonstrate to the French that the United States fully understands and takes seriously France’s concerns about its security interests, - especially those interests that France holds in common with the United States. Given the dedication of the French to maintaining their sovereignty and independence of action in support of their interests, the alternative of not taking advantage of this opportunity for cooperation and a stronger U.S.-French relationship could create a fissure in the relationship, resulting in a competition between U.S. and French interests. Such an occurrence would not benefit the prospects for a stable 21st Century Europe: - a stability that the 1995 National Security Strategy of the United States calls “vital to our own security.” (National Security Strategy of Engagement and Enlargement 1995, 25)

C. CHINESE POST-COLD WAR STAKES IN THE ABM TREATY

Since China is one of the five acknowledged nuclear powers and possesses ICBM and SLBM forces, one can assume that it has some interest in the U.S. TMD program and the ABM Treaty. However, due to the current lack of “transparency” in Chinese defense affairs and an absence of public official documents delineating Chinese national interests and security strategy, it is somewhat

difficult to assess what that interest may be and how important it is to the Chinese leadership. Nevertheless it would be prudent to attempt to logically assess what "stakes" the Chinese might believe they have in the U.S. TMD program and the ABM Treaty: not necessarily to accommodate Chinese concerns in U.S. decision-making, but at least to be aware of and prepared for their probable reactions to U.S. decisions with respect to the TMD program and the ABM Treaty. Such awareness might help the United States to shape its decisions in a manner that supports U.S. national security interests yet at the same time minimizes the potential for tension in U.S.-Chinese relations and the consequences those tensions might hold for U.S. relations with East Asia as a whole.

Although many U.S. foreign policy analysts would say that it is unclear exactly what direction Chinese foreign policy is taking in the post-Cold War world, it is clear that China is an emerging power in the East Asia-Pacific region in terms of its economic growth, increasing military power, and expansive extra-territorial claims.

1. Chinese Economic Growth

The Chinese economy is growing rapidly. In 1994, it grew at a robust rate of 11.8%. (Kaye 1995, 15) The negative side to this fast growth is that it contributed to a 21.7% inflation rate for 1994. The government's goal is to restrain economic growth to 8-9% and thus reduce inflation to under 15%. (Kaye 1995, 15) Yet, even at a restrained growth rate, the Chinese economy would grow at a rate three times that of the United States. In spite of the inflation caused by a somewhat overheated economy, China represents a significant economic market for the world, with great potential for future growth. Malaysian Prime Minister Datuk Seri Mahathir Mohamad stated in April 1995 that:

It is high time for us [East Asian nations] to fully view China as the enormous [economic] opportunity that it is. (Chanda 1995, 25)

2. Growth in Chinese Military Capability

China is also growing in terms of military capability. In aggregate numbers, China has the largest military in Asia. The following chart reflects Chinese conventional military strength in East Asia relative to the United States, Japan, Russia, Vietnam, and the Philippines.

**AGGREGATE CHINESE CONVENTIONAL MILITARY STRENGTH IN
EAST ASIA**

	CHINA	U.S.	JAPAN	RUSSIA	VIETNAM	PHILIPPINES
TANKS	9,200	233	1,160	6,000	2,000	126
SUBMARINES	51	39	15	50	-	-
DESTROYERS/FRIGATES	55	68	62	50	7	1
PATROL/COASTAL CRAFT	870	-	-	-	55	44
COMBAT AIRCRAFT	5,845	610	440	885	190	43
ARMED FORCES	2,930,000	100,000	237,7000	690,000	572,000	106,500

(Chanda 1995, 26/Arms Control Today, November 1994, 34)

In addition to these large numbers, China has increased its defense budget significantly. According to recent calculations by the International Institute for Strategic Studies,

China's total defense spending, including official and unofficial figures, is now the third-largest in the world, and rising fast. (The Economist, June 11, 1994, 29)

Independent estimates of China's annual military spending range from \$10 to \$50 billion. This spending has been used largely for improving China's power projection capability by buying SU-27 fighter bombers, and Kilo diesel attack submarines from Russia; air refueling technology from Iran; and tank-armor, missile and jet-fighter technology from Israel. (Mann 1995, A10) Additionally, the relatively low yield of the recent Chinese nuclear tests indicates that the Chinese may be modernizing their nuclear force by developing smaller multiple reentry vehicle (MRV) warheads for their ICBMs and SLBMs. (Godwin and Schulz 1993, 3) This could be made more significant by the development of the Dong-Feng 41 (DF-41) ICBM which will have a MIRV capability and an approximate range of 7500 miles. This missile is scheduled for deployment in 2010. (Arms Control Today, December 1993, 29) Significantly, conventional weapons are not being acquired in large numbers. In the context of China's goal of self-reliance, the main purpose of these acquisitions is to facilitate China's research, development, testing, evaluation and production of its own future weapons. (Godwin and Schulz 1993, 6)

3. Chinese Nationalism and Extra-territorial Claims

China's view of its place in the world is rooted in its history. According to Yosef Bodansky, a contributing editor with the London-based Defense and Foreign Affairs Strategic Policy magazine,

The leaders of the post-Deng generation are a sharp deviation from their elders. Whereas the elder leaders were preoccupied with the survival of the Chinese Revolution in a hostile world surrounding it, the younger leaders grew up in a Communist China and now come to power assertive and self-confident about a very strong China. (Bodansky 1994, 13)

Indeed, in the view of many, these new Chinese leaders have a vision of a strong China reasserting itself as a world leader and a first-rank superpower. Their vision of the PRC is a combination of the 5,000-year legacy of China and a perceived role for Beijing as the natural leader of the developing world. According to Paul Godwin, a China specialist at the U.S. National War College,

I had assumed that when China's revolutionary elite passed away, the venom of Marxism-Leninism would be removed from China's defense policies. But that venom has been replaced by extreme Chinese nationalism. These young guys I meet [from the Chinese military] are extremely nationalistic...The objective is, 'rich country, strong army.' (Godwin cited in Mann 1995, A10)

The nationalism that Godwin believes is rising in China is also manifested in Chinese extra-territorial claims. In the view of some, these claims include a reestablishment of Chinese influence in what was recently Soviet Central Asia and expansion into the South China Sea.

a. Chinese Intentions in Central Asia

With respect to Central Asia, many believe that China has aspirations to establish a new "Silk Road" in the region. In mid-April 1994, Chinese Premier Li Peng led a large Chinese delegation on a 12-day tour of Uzbekistan, Turkmenistan, Kirgistan, and Kazakhstan. According to Chinese officials, this visit was a fact-finding tour to enhance political and economic relations between China and Central Asia. (Bodansky 1994, 13) In the view of many observers, however, the primary objective of this trip was to revive China's traditional political and economic hegemony in the region. Such observers point to the statement made by Li Peng after a meeting with Uzbekistan's President,

Islam Karimov: "Now we want to build a new 'Silk road' to make our relations even more glorious."
(Bodansky 1994, 13)

b. Chinese Intentions in the South China Sea

In the case of the South China Sea, Chinese intentions may be clearer than in central Asia. In the opinion of some observers, China has been engaged in a quiet but relentless advance into the South China Sea for over two decades. In 1974, the Chinese seized the Paracel Islands from a South Vietnamese garrison. In 1988, China captured six atolls in the Spratly Islands from the Vietnamese. Besides the Chinese and Vietnamese, title to parts of the Spratly Islands is also claimed by the Philippines, Malaysia, Brunei and Taiwan. In 1992, China laid claim to additional reefs in the Spratlys and finally, in 1995, it occupied Mischief Reef, which was claimed by the Philippines. (Chanda, Tiglao and McBeth 1995, 14) Critics of this Chinese action point out that its significance does not lie in the fact that the Chinese flag and guard posts were planted on the reef or in the types of armaments the Chinese ships carried. Rather, they claim that the significance lies in the political message the Chinese act of claiming the reef and sending naval vessels to the area conveyed. Prior to the Mischief Reef incident, all Chinese claims in the Spratlys had been directed against the Vietnamese. However, by laying claim to Mischief Reef, the Chinese brought themselves into conflict with a noncommunist government and, more significantly, a member of the Association of Southeast Asian Nations (ASEAN). According to some observers, the Chinese are sending the following message to all nations with claims on the Spratlys in general and, specifically, to the Philippines and Vietnam: "Cooperate with us in joint development of the Spratlys on our terms, or we will take possession of the islands." (Chanda, Tiglao and McBeth 1995, 15)

According to Nayan Chanda, Rigoberto Tiglao and John McBeth, reporting for the Far Eastern Economic Review, China has never laid out its maritime claims in the South China Sea in detail, but:

its so-called historic waters have always been indicated on Chinese maps by a dotted line that skirts the shores of Vietnam, the Philippines, Malaysia and Brunei, making the South China Sea virtually a Chinese lake. (Chanda, Tiglao and McBeth 1995, 16)

c. Chinese Motivations for Extra-Territorial Claims

Alfred D. Wilhelm Jr. offered a possible explanation for this Chinese return to their "historic claims:"

A hundred years of 'foreign domination' enshrined security - the freedom from fear of dominant hostile powers - as a primary objective of the Chinese Communist Party. (Wilhelm 1993, 12)

The Chinese believe that, since the Opium War of 1840, this "foreign domination" resulted in the loss of significant amounts of Chinese territory to other countries. They consider this territorial loss to include territory in the north and northwest regions to Russia, the loss of portions of Guangxi and Yunnan to the French, the loss of Hong Kong to Britain as well as the Japanese invasion in the 1930s and the loss of Taiwan. In all, the Chinese believe that they have lost over three million square kilometers, not including sea areas, to foreign invasion and exploitation. (Cui Yu Chen 1994) The memory of this past "foreign exploitation" contributes to what might be termed a "never again" mentality that makes the Chinese determined to guard what they view as their national interests.

China's desire to regain territory that it believes belongs to it may be spurred by how it views its own situation in three areas: living space, resources and population, and future growth. China believes that its living space is diminishing. According to their official estimates, the average cultivated land per capita is 1.5 hectares, only one third of the world average. According to Lieut. Col. Cui Yu Chen, a writer on military affairs at the Research office of the Chengdu military Region,

China comprises 22% of the world population but only 7% of its cultivable land. Cultivated land in China, because of construction, is reduced by 7 million hectares every year. It is estimated by the year 2000 that average land holdings per capita will only be .77 hectares. That is 508 square meters. After 100 years, all our cultivated land will disappear totally. (Cui Yu Chen 1994)

China also believes that it is facing a future resource and population crisis. Although China is now an oil exporter, it expects to be a net importer of oil by the year 2000 due to economic and industrial growth. Additionally, Cui states that "by the end of this century, just to have enough to eat,

China has to produce an additional 90 million tons of food, while its per-capita productivity is being reduced by one sixth.” (Cui Yu Chen 1994)

In terms of future growth to meet the challenges that Lieut. Col. Cui has described, many observers believe that the Chinese Government is privately asking the question of “where China’s new borderland will be.” (Chanda 1995, 28) The logical answer that stems from such an analysis might be: “The potentially resource-rich South China Sea.”

4. Possible Chinese Security Interests vs U.S. Security Interests in the East Asia-Pacific

Although the Chinese have not stated what their security interests are in the East Asia-Pacific region beyond what Jonathan D. Pollack of the Rand Corporation calls “formulaic declarations of benign intent,” (Pollack 1994, 5) some basic Chinese interests might be advanced. The first, might be to secure the territory China believes rightfully falls within its sphere of influence. Such action might help to insure that China “never again” falls under “foreign domination,” preventing a future “century of humiliation.” The second, might be to expand Chinese influence throughout the East Asia-Pacific region. In doing so, China could ensure that it deals from a position of political, military and economic advantage in its bilateral and multilateral relationships with the other countries in the region. This would facilitate the achievement of its third security interest: secure access to natural resources to support future Chinese economic and population growth.

The United States considers its present interests to be the same as they have been for the past two centuries: peace and security; commercial access to the region; freedom of navigation; and the prevention of the rise of any hegemonic power or coalition. (United States Security Strategy for the East Asia-Pacific Region 1995, 5) Of these four interests, commercial access is the most vital. Freedom of navigation and the prevention of the rise of a regional hegemon, while also vital, support commercial access and ensure the continuation of that access. According to Hans Binnendijk and Patrick M. Cronin,

The [United States’] growing interdependence with the economies of the [East Asia-Pacific] region is altering the international security landscape. The GNP of Asian countries presently amounts to a quarter of global GNP and may climb to half by the middle of the next century. Meanwhile, American jobs tied to the region’s economy will double from 3 to 6 million in the next five years. (Binnendijk and Cronin 1995, 6)

Given that possible Chinese interests center on expanding Beijing's influence in the East Asia-Pacific region - for economic and nationalistic reasons - and that stated U.S. interests center on continued and expanded economic access to the region, there may be potential "points of tension" in the relationship between the two countries.

5. Possible Chinese Security Strategy for the East Asia-Pacific Region

The Chinese have not described their security strategy in the East Asia-Pacific region. However, based on the previous discussion of the possible Chinese interests in the region and demonstrated Chinese behavior in the region, it is possible to identify a coherent security strategy they may be pursuing. This strategy may be composed of three mutually supporting components: "smile diplomacy," periodic "challenge and probe" of the regional status quo, and adherence to a "double standard" in international relations.

a. "Smile Diplomacy"

Because it is in China's interest to have a tranquil international environment to carry out the "four modernizations" of agriculture, industry, science and technology and defense, it is currently engaging in what some observers term "smile diplomacy." (Godwin and Schulz 1994, 7) The Chinese appear to have two objectives in doing this. The first is to establish, whenever possible, positive working relationships with regional countries. Since China represents a very lucrative international investment opportunity, foreign countries want to take advantage of that opportunity.

It is generally accepted in the West that foreign investment in China provides not only economic benefits but also acts to open China up to the outside world and functions as a lever of influence to restrain Chinese behavior domestically and internationally by engaging the Chinese in joint development efforts. Koichi Sato, a lecturer in Chinese foreign policy at the Open University of Japan in Tokyo, stated in April 1995 that Chinese adventurism in the South China Sea would be restrained in view of such factors.

Fear of economic sanctions would have to rank high in Chinese calculations, if only because Japan is China's biggest source of official loans and foreign investment. These Japanese loans are seen as an insurance policy for stability in the region. (Sato 1995, 32)

Yet the fact that there is so much Japanese investment in China is interesting in Paul Godwin's and John Schulz's view: "From every indication, China's current primary concern about the future of East Asia begins with Japan."

Chinese security elites see Japan's economic and technological capability as being easily transformed into cutting-edge indigenous military production that would provide the economic and military strength required for regional preeminence. (Godwin and Schulz 1994, 8)

From this perspective, the Chinese might view Japanese investment in China as a double-edged sword that could be manipulated by China to restrain Japan as much as it could be used by Japan to influence China.

In the case of Taiwan, many observers believe that the invasion menace has receded sharply in recent years as a result of "smile diplomacy's" economic interdependence objective. Julian Baum, a reporter for the Far Eastern Economic Review, stated that:

It [China's strategy] is pulling Taiwan into an interdependent relationship with the Chinese mainland - which could weaken Taipei's ability to resist Beijing's claim over it. (Baum 1995, 25)

Additionally, Malaysia has openly adopted the policy of engaging China more closely in the economic realm as a method of moderating Chinese behavior in East Asia. (Chanda, Tiglao and McBeth 1995, 15) China's policy of "smile diplomacy" also extends to Russia, where China is acquiring advanced weaponry and defense industry advisors. While Russia insists on hard currency payments for such goods and services provided to other countries, the deals worked out with China are estimated to include as much as 40% payment in Chinese manufactured consumer goods, including computers, clothing and foodstuffs; these are items that Russia would have to pay hard currency for elsewhere. (Godwin and Schulz 1993, 6) Although the countries that are engaging China economically are benefitting from that engagement and arguably may be gaining some influence over Chinese behavior, China might also be maneuvering into a position that puts the investing

countries into a state of dependency on China. This situation might give China the upper hand in international dealings with competing countries.

b. "Challenge and Probe" of the Regional Status Quo

To many observers, China is not a status quo power. Essentially, this means that the Chinese want to wield diplomatic, economic and military influence at least at the level of a major regional power. (Chanda 1995, 25) It appears from certain Chinese actions that periodic challenges and probes of the regional status quo are also an element of Beijing's security strategy. This tactic of "challenge and probe" might be intended in part to demonstrate to regional observers that China is a vibrant and emerging power to be respected while the status quo - possibly represented by U.S. regional influence - is in decline.

The Chinese may have been sending such a message in the spring of 1994 when they played a role in defusing the North Korean nuclear crisis. When tensions between North Korea and the international community over Pyongyang's nuclear program reached crisis levels, the Chinese - South Korean connection proved a valuable adjunct to discussions underway in other channels. (Pollack 1994, 4) Chinese actions prevented a potentially catastrophic collapse of the North Korean Government by blocking the imposition of sanctions, while at the same time facilitating the eventual agreement that calmed the crisis, showing that China could play a constructive role in regional security issues. (The Economist, April 9, 1994, 15) In this crisis, China saw an opportunity to challenge the regional status quo by playing a role in resolving a crisis that was proving to be very difficult for the United States. As The Economist put it,

America would hate to see China take credit for solving Asia's biggest security problem. China, meanwhile, would for once have proved itself the greater power for Asia to reckon with. (The Economist, April 9, 1994, 15)

By playing a role in preventing communist North Korea from being swallowed-up by capitalist South Korea - as East Germany was swallowed-up by West Germany - China might seek to demonstrate that its power and influence are ascending in Asia while U.S. influence may be waning.

The Chinese may have been sending another message, more direct this time, to the United States in October 1994 when the aircraft carrier USS Kitty Hawk found itself being shadowed by a

Chinese submarine while on a routine deployment in the Yellow Sea. When the carrier launched aircraft to track the submarine, the American aircraft found themselves being shadowed by Chinese fighters. The following day, a U.S. fighter on a routine patrol from the Kitty Hawk was joined by a Chinese fighter in the same area. Nigel Holloway, a reporter for the Far Eastern Economic Review, reported that:

...at a social gathering in Beijing some time after the incident, a Chinese official told a U.S. officer that the next time such an incident occurred so close to Chinese territory, China would send up its latest SU-27 fighters and shoot down the American aircraft. (Holloway 1995, 30)

Although U.S. officials have played down the significance of both the military and social encounters, they are certainly instructive as to possible Chinese intentions to challenge the status quo in East Asia. The Chinese might also see domestic advantages in this action. Jeff Mann, a staff writer for the Los Angeles Times, reported in April 1995 that official Chinese publications had stated that "Obviously, China, which is becoming mighty, is regarded as an opponent not to be taken lightly." (Mann 1995, A10)

Four months after the Kitty Hawk incident, China challenged Philippine sovereignty over Mischief Reef in the Spratly Islands by planting its flag and constructing guard posts there as well as backing the action up with an armed naval presence of eight naval ships. "The reef is located only 120 miles off the Philippine coast, inside the Philippines' 200-mile exclusive economic zone." (Eirinberg 1995, 1) The Philippines and other ASEAN Spratly claimants have repeatedly rebuffed Chinese offers of bilateral negotiations for joint development of the islands. Keith W. Eirinberg, a Fellow in the Asian Studies Program at the Center for Strategic and International Studies, shed some light on the significance of the Spratly Islands in testimony before the Senate Foreign Relations Subcommittee on East Asian and Pacific Affairs:

Strategically, they sit astride one of the world's most important sea-lanes for commerce and military transit. Economically, the islands may hold the key to vast wealth: some geologists predict that they sit above enormous undersea reservoirs of oil and natural gas. (Eirenberg 1995, 1)

The true significance of the Chinese action at Mischief Reef is that for the first time China is challenging ASEAN directly. (Chanda, Tiglao and McBeth 1995, 14) There may also be significance in the fact that all of the members of ASEAN are allies and/or partners in some way of the United States.

Yet another area where China may be making a "challenge and probe" of the regional status quo is Taiwan. Jonathan D. Pollack, writing for Arms Control Today, states:

Beijing's periodic warnings to Taipei about its unwillingness to tolerate any moves toward Taiwanese independence, underscores that China remains unreconciled to the status quo. (Pollack 1994, 5)

In his speech during the Chinese New Year, Chinese President Jiang Zemin refused to forswear the use of force against Taiwan to make good Chinese claims to the island. Taipei interprets this as the first indication of the attitude towards Taiwan of the post-Deng Xiaping leadership in China. (Baum 1995, 25) Nayan Chanda, reporting for the Far Eastern Economic Review, quoted a Chinese military official as saying that:

We do not need massive military power to reunify Taiwan. All Beijing needs to do is to announce a submarine blockade around the island. Whether the blockade is effective or not, a large number of Taiwanese business people will immediately flee the country. Then if the government does not come around and negotiate, China could fire one or two precision missiles at high-visibility targets, such as offshore military installations, to get Taiwan to the table. (Chanda 1995, 28)

Some observers might interpret this "challenge and probe" of the status quo to be directed as much against the United States as against Taiwan, since Beijing believes that it was humiliated during two previous Taiwan Straits crises by the United States support for Taiwan.

c. Adherence to a "Double Standard" in International Relations

Yet a third possible element of the Chinese security strategy might be to pursue a "double standard" in international relations. For example, there are instances of China portraying itself as a disadvantaged emerging nation seeking to maintain its rights. Additionally some might

argue that China has developed the habit of “moving the goalposts” in this regard. Evidence of such a strategy might be apparent in the Chinese actions in two areas relevant to the U.S. TMD program and the ABM Treaty: nuclear testing and arms control.

1. Nuclear Testing

Until the commencement of the current series of French nuclear tests on September 5, 1995, the United States, Great Britain, France and Russia had been in agreement on maintaining a nuclear testing moratorium since November of 1992. These countries were in general agreement at the time that the cessation of nuclear testing would contribute to world stability. Additionally, they believed that a moratorium would demonstrate to the nuclear “have not” nations of the world that the nuclear powers are serious about nuclear disarmament and the possibility of a Comprehensive Test Ban Treaty (CTBT). (Lockwood and Grissom 1994, 28) Officially, one of the main purposes of the current French tests is to gather simulation data so that technology can be developed that will make further nuclear testing unnecessary to ensure the safety and reliability of nuclear weapons. China, however, never participated in the moratorium.

Dingli Shen, in an article explaining Chinese nuclear policy in the Bulletin of the Atomic Scientists, wrote that China unofficially observed the testing moratorium for nearly a year until the October 7, 1994, Chinese nuclear test. (Shen 1994, 51) However, the Arms Control Association reported in its November 1994 issue that China had conducted two other nuclear tests in the twelve months preceding October 1994. (Arms Control Today, November 1994, 33) The most recent Chinese nuclear test occurred on May 15, 1995, bringing to five the number of Chinese tests conducted while the other recognized nuclear powers observed their self-imposed moratorium.

According to Dingli Shen, given that China has committed itself to sign a CTBT no later than 1996, the other four recognized nuclear powers should acknowledge that it is reasonable for China to continue nuclear testing because they have conducted many more nuclear tests than China. Since 1945 the United States has conducted 942 tests; Russia, 715; France, 210; Britain, 44; and China, 43. Therefore, they should “note that it is unfair to ask China to stop testing when they do.” (Shen 1994, 52) Furthermore, Shen asserts that in the post-Cold War era, testing nuclear weapons for safety and reliability purposes is more important than ever. However, he goes on to admit that “logically one

cannot exclude the possibility that weapons modernization might also be an objective of testing" although "this purpose would presumably have a lower priority." (Shen 1994, 53)

Although the Chinese portrait of Beijing's nuclear policy might seem reasonable, there is evidence that China might have additional motives. The first is to mask the modernization of their nuclear forces. If China is to develop and deploy multiple warheads or MIRV capabilities in its strategic forces, small warheads are a critical component and additional testing will be required to develop them. Indeed, the Beijing commitment to sign a CTBT no later than 1996 may relate to its estimate of how long it will take to fully test such new warheads that will have improved yield to weight ratios and accuracy. (Lockwood 1994, 24)

Second, some observers might speculate that in establishing a nuclear status "separate" from the other four recognized nuclear powers, China might seek to restrict their nuclear programs while legitimizing its own. (Malik 1994, 8) Grounds for such speculation might be reflected in Dingli Shen's comments in the November 1994 issue of Pacific Research that:

While a CTBT would indeed help the cause of nuclear nonproliferation, only a complete ban on the possession of nuclear weapons by all nations will eventually ensure the fairness and effectiveness of nonproliferation. Thus success in stopping the spread of nuclear weapons will, ultimately, depend upon delegitimising nuclear weapons and to this end China might advocate a Nuclear Weapons Convention in which all nations of the world accept the illegality of nuclear weapons. (Shen 1994, 3)

While Shen emphasizes the need for the Chinese to test for reasons of safety and reliability, he deftly points out that with each passing day "international pressure on the countries observing the moratorium not to test will mount. There will be a time limit beyond which these nations will be pressed to stop testing" [completely.] (Shen 1994, 4) Shen's prediction might arguably have been borne out, given the intense international disapproval France has met with during its current nuclear testing series. Opposition to the French testing has been much greater than any voiced against the Chinese tests conducted since November 1992.

Might it be possible for China to maneuver itself into a position where a de facto CTBT is imposed on all of the nuclear powers but itself? And might China also, once having artfully used the

“double standard” to achieve this position, use the proposal for a Nuclear Weapons Convention outlawing nuclear weapons - a proposal that may be unacceptable to the other nuclear powers, given their stated national security interests - as its precondition for submitting to a formal CTBT? By moving the nuclear arena “goalposts” in this manner, China might be able to shift the balance of power in East Asia through world pressure on the other four nuclear powers, particularly the United States. According to Paul Godwin and John Schulz, it is important to remember in this context that Chinese nuclear force strategy relates directly to China’s perception of its experiences with the United States during the Korean War and again during two separate Taiwan-Formosa Straits crises, when China was subjected to what it continues to describe as “nuclear blackmail” by the United States. “For China, like Israel in a very different context, the byword is, ‘never again.’” (Godwin and Schulz 1993, 6)

2. Arms Control

When Secretary of Defense William Perry visited China in October 1994, he reportedly told the Chinese that the United States does not regard the Chinese military program as a threat. However, he went on to say that “because of the lack of knowledge about the details of this program, many of [China’s] neighbors have that concern.” (Holloway 1995, 30) Mr. Perry’s statements went to the heart of the concept of “transparency” in military affairs, a concept accepted and practiced by the West, but not received well in Beijing. (Godwin and Schulz 1994, 10)

Observers might draw two conclusions about the Chinese aversion to transparency in arms control and military affairs. First, there may be a disconnect between how strong China considers itself to be and how strong the outside world considers it. If China deems itself weaker than the world perceives it to be, its leaders might think it in China’s interest to promote a perception by its neighbors that it is stronger than is actually the case. At least one student of East Asian security has used the paradox of the Puffer Fish to describe this strategy. It might be recalled that the Puffer Fish, in order to defend itself against stronger predators, makes itself swell up in order to look much bigger and more formidable than it actually is. In essence, Chinese leaders might believe that if they open up their defense establishment to a variety of arms-control-regime inspections, the outside world might learn how weak China’s military actually is. For this reason, China might be suspicious of regional and especially global arms control arrangements. In the view of many East Asian observers,

Chinese leaders are less than fully convinced that by working collectively with others they can come to arrangements that improve their country's security. In other words, the "century of humiliation," the "period of unequal treaties," and other experiences with military powers far stronger than China are a major historical impediment to arms control cooperation. (Wilhelm 1993, 12)

The second plausible explanation for the Chinese aversion to arms control transparency is that there may be an additional element to the Puffer Fish strategy. In light of the types of modernization that are taking place in the Chinese military, such as improved power projection - both conventional and nuclear - it might be possible that China is not only using the Puffer Fish strategy to mask its self-ascribed current weakness, but also to pursue a long-term modernization program that will really make China a military power to contend with. The Chinese purchases of Russian military technology, such as Kilo class submarines, and SU-27 fighter-bombers, as well as their employment of large numbers of Russian arms design and manufacturing specialists indicate that China might intend to become self-reliant in its own long-term military modernization, using advanced Russian technology as the base for that modernization.

Some analysts believe that China's Puffer Fish strategy might be back-firing because of the regional fears among its neighbors that Secretary Perry spoke of. Fears created by the simultaneity of China's economic growth and military modernization might contribute to a return to "old attitudinal reflexes toward a 'Middle kingdom' syndrome." (Godwin and Schulz 194, 7) However, might China's leadership believe that the regional fears being discussed are much smaller than what might be the case if arms control transparency revealed long-term Chinese goals for its role in East Asia?

3. Military Spending

How much China is spending in its military budget is open to debate. According to the Chinese Ambassador to the United States, Li Daoyu, "China's armed forces are entirely defensive in nature and the military spending required to support it remains the smallest among big nations." The Ambassador goes on to cite statistics that show China's per capita military spending as \$6 compared with \$1,100 in the United States and \$300 in Japan for a total Chinese military budget of approximately \$7.35 billion. (Daoyu 1993, 10) However, according to many analysts, actual Chinese defense spending may be over five times the amount cited by the ambassador

because the Chinese leave huge areas such as research and development and pensions out of their official budgeting figures. (The Economist, June 11, 1994, 30)

There may be many reasons for the Chinese to under-report their defense budget, but two plausible reasons have particular currency. First, nationalism is beginning to play a large role in domestic Chinese politics, and increased defense spending may be a payoff for military support for a post-Deng Government. Supporting evidence for such speculation might be that since Jiang Zemin has been President, the PLA has come to comprise 25% of the 190-member Communist Party Central Committee. (The Economist, June 11, 1994, 31) Lincoln Kaye, reporting for the Far Eastern Economic Review from Beijing, states:

No player in the post-Deng succession stakes can afford to relinquish the 'nationalism card' to his rivals. Jiang has been canvassing the military for support since August 1994. (Kaye 1995, 16)

Kaye's assessment of Jiang is corroborated by Julian Baum, another reporter for the Far Eastern Economic Review reporting from Taipei, who believes that Jiang's selection of literally hundreds of young generals over more senior officers, to head the PLA and also participate in Politburo meetings, is an indicator that he is positioning himself to have full PLA support to succeed Deng. (Baum 1995, 25) Looked at from this perspective, Chinese reticence about transparency might be meant to forestall international alarm over possible increased military influence in a post-Deng government.

The second possible reason for the secrecy surrounding their defense budget might be that the Chinese Government does not want to be specific about the areas in which it is modernizing. In the view of many observers, the modernization emphasis is being put on power projection capabilities. Such capabilities include MIRVs for the ICBM and SLBM forces, improved air support for naval forces, and improved command and control capabilities. The June 11, 1994, issue of The Economist reported that the bulk of the increased Chinese military spending has been invested in improving blue-water naval capabilities. It was possibly to this end, that in 1991 a Chinese military delegation went to Ukraine to look at the then-continuing construction of the Russian aircraft carrier Varyag. At that time, there was great concern that China might buy the huge carrier, which would have given it power projection capabilities unmatched by anyone in the Asia-Pacific region except the United

States. (Godwin and Schulz 1993, 5) Even without the Varyag, however, the Chinese have improved their ability to provide air support to deployed naval forces through the purchase of air-to-air refueling technology from Iran and long-range SU-27 fighter-bombers from Russia. Additionally, the purchase of four Kilo-class submarines from Russia with the pending order of twelve more, significantly increases the Chinese ability to project power and influence throughout the entire Asia-Pacific region.

6. Potential Chinese "Use" of the ABM Treaty

Although Chinese nuclear doctrine does not speak in terms of "sufficiency" or echo the minimum deterrence concepts in French doctrine, the previous discussion indicates that the notion of "nuclear blackmail," which better defines China's experience and ensures that in a crisis it will not face unanswerable nuclear threats in pursuit of its policy objectives, translates to much the same thing. (Godwin and Schulz 1993, 7) Thus, it can be reasoned that in China the issue of missile defenses and the ABM Treaty might hold some significance. J. Mohan Malik, a professor at Deakin University in Victoria, Australia, noted that during the SDI debate of the 1980s, the Chinese Government became alarmed about the capability of the U.S. SDI program and its potential Soviet counterpart. According to Malik, the Chinese were concerned that the U.S and Soviet strategic defenses could

neutralize or undermine the independent nuclear deterrent capabilities possessed by China, leaving her vulnerable to nuclear blackmail or coercion by one or both superpowers. (Malik 1994, 6)

According to Chinese officials, as a result of the SDI program, China changed its policy on making reductions in its own nuclear force. In June 1982, prior to President Reagan's announcement of the SDI program in March 1983, the Chinese Foreign Minister, Huang Hua, declared that once the United States and the USSR had made reductions of 50% in their nuclear arsenals, China would consider making reductions in its arsenal. However, after the SDI announcement and after the 50% reduction goal had officially become the basis of U.S. and Soviet strategic arms negotiations in 1986, China determined that 50% reductions were not sufficient and that an 85 to 90% reduction in the U.S. and Soviet arsenals would now be required as a result of the SDI program. (Malik 1994, 7)

Malik's interpretation of the 1980s Chinese position on SDI was recently validated. In February of 1995, an unnamed Chinese Foreign Ministry official stated that:

The United States will increase the danger of nuclear war and trigger an arms race in outer-space if it proceeds with a plan to develop an advanced ballistic missile defense system that could be deployed around United States forces in Asia. (Tyler 1995, 4)

New York Times reporter Patrick Tyler, commenting on this statement, went on to report that:

China's opposition to antimissile systems stems from fears in the military leadership that an American antimissile system, if deployed in Asia to protect Japan or South Korea, could render China's small force of nuclear-tipped strategic missiles completely ineffective. (Tyler 1995, 4)

Reportedly, Chinese officials have privately told high-level American visitors that "China's national prestige demands that it maintain the credibility of its nuclear deterrent force of about 300 long-range warheads. Without that credibility, China would be subject to blackmail." (Tyler 1995, 4)

The 1995 Chinese reaction to the U.S. TMD program is instructive in two respects. First, the current U.S. program to develop defenses against theater and tactical ballistic missiles is not nearly as comprehensive in scope or sophisticated in technology as the SDI program; yet the Chinese have reacted very strongly to it. Second, the remarks of the unnamed Chinese Foreign Ministry official (cited above), indicate that China believes that U.S. TMD systems deployed for the defense of U.S. forces, in South Korea or Japan pose a security threat to China. At the same time, the United States Security Strategy for the East Asia-Pacific Region states that deployed U.S. forces in the region support several U.S. objectives in the region: to guarantee the security of the sea lanes, to deter conflicts, to promote regional cooperation, and to deny political or economic control of the region by a rival power. According to the same policy document,

There is no more important bilateral relationship than the one we have with Japan. It is fundamental to both our Pacific security policy and our global strategic objectives. Our security alliance with Japan is the linchpin of United States security policy in Asia. (United States Security Strategy for the East Asia-Pacific Region 1995, 10)

The document also says of the U.S.-Republic of Korea relationship:

Our security relationship with the Republic of Korea continues to be central to the stability of the Korean Peninsula and Northeast Asia, as it has been for over forty years. (United States Security Strategy for the East Asia-Pacific Region 1995, 10)

These statements, combined with the earlier assessment of potential Chinese security interests in East Asia and China's strategy for securing those interests, indicates that (unlike U.S. and French and British security interests in the post-Cold War world) U.S. and Chinese interests may be opposed to each other. According to Ross H. Munro, Director of the Asia Program at the Foreign Policy Research Institute, in testimony before the Senate Subcommittee on East Asia and Pacific Affairs

After years of tacitly accepting a U.S. military presence in Asia as a positive force that discouraged full-scale Japanese rearmament, Chinese officials now openly express their resentment over the U.S. security role in Asia. Part of the explanation is that the United States currently is the only country that seems to possess both the capability and the will to resist some of China's ambitions. (Munro 1995, 5)

Given this likely opposition between U.S. and Chinese security interests and strategies in the East Asia-Pacific region, some observers believe that the Chinese response to the U.S. TMD program is calculated to discourage the United States from deploying TMD in the region. At a minimum, these observers assert, it is calculated to restrict the deployment in a manner that would be beneficial to China. To this end, China might attempt to portray U.S. TMD as an offensive threat to China: offensive in the sense that it would serve to inhibit China's ability to wield its overwhelming military superiority in supporting its regional ambitions. In this way, China might portray U.S. TMD deployment in the region as a threat to Chinese sovereignty and as a destabilizing factor. (Interview with Senate Staffer, 24 October 1995)

Some regional observers believe that the Chinese move to discourage U.S. TMD deployment in East Asia is based on China's desire to continue funding its current military modernization. According to a Senate Staffer, the Chinese want to concentrate on building a blue-water naval capability and a modernized air force. A U.S. TMD deployment in Asia would force them to divert

funding towards other areas to counter the deployment. In any event, however, the Chinese would not be likely to seek a “hi-tech” counter to the U.S. TMD systems. Rather they would likely seek to overwhelm these systems with increased missile production and warhead proliferation. (Interview with Senate Staffer, 24 October 1995) This assessment is validated by the testimony of John J. Schulz before the Senate Foreign Relations Committee. Schulz stated:

Unless the United States insists on deploying theater missile defense systems in Japan or other parts of East Asia, it is highly unlikely Beijing will get bigger or aspire to much more than the Chinese equivalent of the French force de frappe. (Schulz 1995, 8)

Based on China’s reaction to the U.S. TMD program and the previous analysis of its potential security interests and strategy for securing those interests, the likely “stake” that China has in the ABM Treaty is to use it for propaganda purposes. According to some observers in Washington, the Chinese have made it known that they would view a U.S. withdrawal from the ABM Treaty as destabilizing and that they would have to “respond” to such an occurrence. The potential responses might include the continued modernization of their conventional and nuclear forces, increased proliferation of WMD and missile system technology in Asia, and the deployment of large numbers of offensive missile systems. (Interview with Senate Staffer, 24 October 1995) In essence, the Chinese are threatening or at least forecasting a regional arms race as a result of a U.S. withdrawal from the ABM Treaty. Given what some observers see as China’s overall ambition (to become a regional and global power), China might use a U.S. withdrawal from the ABM Treaty as a regional propaganda weapon against the United States.

As discussed previously, the Chinese have proven themselves adept at manipulating international discussions and propagandizing to secure their national interests. China’s affinity for “moving the goalposts” in arms control and nuclear testing matters and its apparent ambition to show itself the rising power in East Asia and the United States as the declining power might be evidence of this possibility. If the Chinese could successfully use a U.S. withdrawal from the ABM Treaty to portray the United States as a would-be regional hegemon with colonial ambitions, significant damage might be done to U.S. national security interests. Following such a strategy, China might be able to

drive a "wedge" between the United States and regional countries, forcing them to choose between acquiescing in Chinese hegemony or continuing to adhere to the status quo of U.S. regional influence.

Although the likelihood of success for the Chinese in such an endeavor might arguably be low, some experts indicate that it is not impossible. In his testimony before the Senate Subcommittee on East Asian and Pacific Affairs, Ross H. Munro stated:

After extensive discussions with influential Southeast Asians, one Western analyst recently summed up their overall attitude toward growing Chinese power as one of "fatalism." As a result, one can discern a tendency in Southeast Asia today to act as if China's power is already greater than it actually is. (Munro 1995, 2)

This analysis of the potential Chinese stakes in the ABM Treaty and of Chinese reactions to the U.S. TMD program, taken in the context of China's apparent ambitions as a regional and global power, indicates that U.S. and Chinese interests in East Asia are opposed to one another. The United States must secure its national security interests in the region, and deploying TMD for the protection of U.S. forces may be necessary to do that. However, those TMD systems should be deployed within the limits of the ABM Treaty in order to deprive China of a "wedge issue" it could arguably use for regional propaganda purposes, to the detriment of U.S. interests.

V. U.S. AND RUSSIAN POST-COLD WAR STAKES IN THE ABM TREATY

The preamble of the ABM Treaty suggests what it was intended to accomplish in the context of the Cold War. To some extent, it outlined the stakes that the United States and Russia had, at least ostensibly, in the treaty at that time:

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,
Proceeding from the premise that nuclear war would have devastating consequences for all mankind,
Considering that effective measures to limit anti-ballistic missile systems would be a substantial factor in curbing the race in strategic offensive arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons,
Proceeding from the premise that the limitation of anti-ballistic missile systems, as well as certain agreed measures with respect to the limitation of strategic offensive arms, would contribute to the creation of more favorable conditions for further negotiations on limiting strategic arms,
Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,
Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament,
Desiring to contribute to the relaxation of international tension and the strengthening of trust between States, ...

To determine what value, if any, the treaty might have for the United States and Russia today, it is appropriate to reexamine its purposes in the context of the post-Cold War world.

As discussed in Chapter III, in 1995, the debate on the continued utility of the ABM Treaty regime is, to some extent, polarized with supporters and opponents of the treaty arguing their positions from Cold War paradigms. On one side, are those whose views coincide with those of the Arms Control Association. From this perspective, the ABM Treaty represents the “cornerstone” of strategic arms control (Pike and Corbin 1995, 3) and any change in its content or interpretation - as adhered to since 1972 - will have negative consequences for U.S. and world security. These negative consequences and costs of withdrawal, reinterpretation or amendment might include, they argue, Russian withdrawal from the START regime, the initiation of U.S.-Russian competition in BMD,

and the breakdown of other arms control regimes. In general, the arguments of this school of thought might be summarized by the following three assertions. First, the development and deployment of any TMD system beyond the capability encompassed by Patriot PAC-3 would open a loophole in the ABM Treaty that could block further reductions in strategic warheads below START II levels. However, this argument neglects the fact that the ABM Treaty does not regulate TMD systems that are not "tested in an ABM mode" as verified by NTM. (Graybeal and McFate 1994, 2)

Second, supporters of "traditional" interpretations of the ABM Treaty assert that the ballistic missile threat facing the United States has been exaggerated and that the defensive weapons being developed would give the United States an ability to defend against strategic ballistic missile attacks, thus making the ABM Treaty irrelevant. (Pike and Corbin 1995, 3) This assertion is based on computer simulations that have been used to determine the full capability of U.S. TMD systems now being developed. According to Ambassador Sidney Graybeal, the ABM Treaty stipulates that NTM alone constitute the verification means for the treaty. Thus, in his view, the use of computer simulation to estimate inherent capabilities of TMD systems is not a valid means of verification of the ABM Treaty regime. (Graybeal, Testimony before the Senate Armed Services Committee 4 May 1995, 3)

Third, this school of thought contended prior to May 1995 that the U.S. pursuit of advanced TMD systems would undercut efforts to achieve an indefinite extension of the Nuclear Nonproliferation Treaty. As events proved, the NPT was extended indefinitely with nearly unanimous support by its member states.

President Clinton's reaffirmation of the U.S. commitment to the "narrow" interpretation of the ABM Treaty as outlined in a 13 July 1993, letter from acting director of the Arms Control and Disarmament Agency, Thomas Graham, to Senator Claiborne Pell, may have had an impact on the NPT outcome. In this letter, Graham articulated the administration's position that the "narrow or traditional interpretation of the ABM Treaty is the correct interpretation, and therefore that the ABM Treaty prohibits the development, testing, and deployment of sea-based, space-based and mobile land-based ABM systems and components without regard to the technology utilized." (Lockwood 1993, 22)

Based upon the conclusions of the Bottom-Up Review (BUR), this position was formalized by Presidential Decision Directive 17 (PDD-17) on U.S. policy on ballistic missile defense and the future of the ABM Treaty, of 11 December 1993. PDD-17 made four stipulations. First, it restructured BMD programs to give first priority to fielding an effective ABM Treaty-compliant TMD capability. Second, National Missile Defense was relegated to second priority as a technology research and development program. Third, it stipulated that the United States would negotiate a clarification to the ABM Treaty to permit development, testing and deployment of highly capable TMD systems. Fourth, it stated that the United States would not seek amendments to the ABM Treaty to permit: 1) expansion in numbers of ABM sites and interceptors; or 2) development, testing or deployment of space-based sensors for direct battle management or space-based interceptors. This action might have had an impact on the NPT extension deliberations by signaling the continued U.S. commitment to world strategic stability.

On the other side of the debate are policy analysts and advocates who believe that the ABM Treaty as currently interpreted is an impediment to U.S. defense in the post-Cold War world. They contend that, since the ABM Treaty was negotiated during the Cold War, it is no longer useful in meeting the new U.S. security requirements. The United States has no stake left in the treaty. Many who favor this viewpoint were strong supporters of the treaty in the past and some even had a hand in bringing the treaty into being. Most notable among this group is former Secretary of State Henry Kissinger. It might be recalled that it was Kissinger's "backchannel" negotiation with Ambassador Anatoly Dobrynin in which the United States agreed to concede its earlier demand that there be a linkage between offensive and defensive arms in the SALT I agreement. (Graybeal and McFate 1994, 7) This "backchannel" negotiation resulted in an ABM Treaty to cover strategic defenses and a separate Interim Agreement on Offensive Arms to cover offensive arms. The Soviet concession in this negotiation was that more comprehensive offensive arms limitations would be determined in a future SALT II. However, in 1995 Kissinger apparently believes that the ABM Treaty - a treaty that he was instrumental in bringing about - has been a failure.

Our experience with the ABM Treaty has shown that a lack of defense neither promotes offensive reductions or otherwise enhances stability. More important, the ABM Treaty is unable to help the United States with one of the most significant post-

Cold War security threats: the proliferation of long range ballistic missiles. In fact, the ABM Treaty now stands in the way of our ability to respond. (Kissinger letter to Chairman of the Senate Armed Services Committee, August 14, 1995)

Interestingly, Kissinger's statement does not address the broader framework of detente (a lessening of tensions) with the Soviet Union, that the ABM Treaty, as a product of the SALT I negotiations, was a part of. It might be remembered that detente was Nixon's and Kissinger's long-term goal in the SALT process. A goal predicated on their belief that both countries had a stake in mutual cooperation. (Bunn 1992, 109) Does Dr. Kissinger, and those who share his views, not believe that the United States and Russia - as the continued keepers of the worlds largest nuclear arsenals - have a continued stake in mutual cooperation. Or do they regard the end of the Cold War and the ensuing breakup of the Soviet Union as "carte blanche" for the United States to pursue its interests without having to consider Russian concerns or interests?

The main contentions of this school of thought, which advocates withdrawal from the ABM Treaty, are that the proliferation of ballistic missiles capable of delivering weapons of mass destruction makes it necessary that the United States develop highly capable missile defenses. The ABM Treaty stands in the way of this initiative. Like their opponents in this debate, the school of thought critical of prevailing interpretations of the ABM Treaty arguably has not articulated the costs or fully considered the implications of withdrawing from, reinterpreting or amending the treaty. Nor do they appear to be amenable to considering any possible benefits of maintaining the treaty at least until international security trends leading to the 21st Century become clearer. This school of thought often cites what might be termed "seven flaws," summarized by the Heritage Foundation, in the ABM Treaty that, in its view, make it detrimental to U.S. security interests in the post-Cold War world:

1. The ABM Treaty does not permit deployment of even a limited nationwide defense against ballistic missiles. Only a single site consisting of 100 interceptors is allowed by the treaty as amended by the protocol of 1974.

2. The ABM Treaty has no expiration date.
3. The ABM Treaty places limits on the development and testing of ABM launchers and interceptors that are too strict and in some cases unclear. This assertion focuses on the debate concerning the “correct” interpretation of Agreed Statement D and whether testing of systems in outer-space is permitted.
4. The ABM Treaty imposes restrictions on the development, testing and deployment of ABM sensors that are too severe and unverifiable. These restrictions include the location of permitted deployment sites as well as the battle-management capabilities of the radars.
5. The ABM Treaty does not adequately define the distinction between “strategic” ABM systems, which are restricted by the Treaty, and the non-restricted “tactical” anti-missile systems used to defend allies or forces in the field against shorter-range missile attacks.
6. The ABM Treaty imposes an unwarranted prohibition against exporting defense systems and components, thus hindering the U.S. ability to offer protection to allies and other security partners.
7. The ABM Treaty is an agreement with the Soviet Union, a state that no longer exists. (Spring 1991, 6-12)

Taken as a group, there are two interesting aspects of these arguments. First, although, the opponents of the ABM Treaty argue that the treaty is inhibiting U.S. TMD programs necessary to meet emerging TBM threats, only one of these arguments bears directly on this issue. That is, the fifth assertion that the treaty does not adequately distinguish between strategic and tactical or theater ballistic missiles. However, this assertion may reflect incomplete analysis. Steven A. Hildreth states:

Although a precise definition of an SBM (Strategic Ballistic Missile) was not included, [in the ABM Treaty] the parties generally agreed that for purposes of the ABM Treaty, SBMs were missiles captured by other strategic nuclear arms control agreements. (Hildreth 1994, 1)

Using this logic, a demarcation between strategic and tactical or theater ballistic missiles does exist with respect to the ABM Treaty. Additionally, the Heritage Foundation points out in a 1991

publications dealing with the ABM Treaty and BMD that there has even been a more formal demarcation agreement made with respect to strategic and tactical ballistic missiles. That publication states:

U.S. and Soviet negotiators last defined this dividing line in 1978. The exact text is classified, but unclassified accounts say that a strategic missile is one whose range and flight characteristics are those of at least the Soviet SS-N-6 (Sawfly) submarine-launched ballistic missile (SLBM). The Sawfly can travel about 1,800 miles and is the shortest-range strategic missile deployed on either side. ("Removing the ABM Treaty Obstacle to U.S. and Soviet Defenses against Missiles, 1991, 10)

The SS-N-6 has now been removed from the Soviet Arsenal as required by START I. Under the current START I regime, the Russian strategic missile force is made up of SS-25s, SS-19s, SS-N-20s and SS-N-18s. The shortest range among these missiles is approximately 6,000 miles. (Hildreth 1994, 10) Using the precedent set by the 1978 agreement cited by the Heritage Foundation, then by current standards, a strategic ballistic missile is one whose range is 6,000 miles or greater. The longest range theater ballistic missile currently is the Chinese made CSS-2 with a range of approximately 1,800 miles: the same approximate range as that of the now non-existent SS-N-6. Therefore, the basis for a demarcation between strategic and tactical or theater ballistic missiles already exists. Such an observation makes the anti-ABM Treaty school's criticism invalid and makes the Clinton administration's efforts to negotiate a demarcation unnecessary and somewhat self-defeating.

The second interesting aspect of these arguments is that three of them - the first, third and fourth - deal exclusively with NMD issues, not TMD issues. Such an observation might support the contention that the ABM Treaty opponents are "piggybacking" an agenda for NMD onto the TMD "bandwagon" to further their own Cold War goal of doing away with the ABM Treaty.

If both sides in the current ABM Treaty/TMD debate are basing their positions on what are essentially, Cold War paradigms, then one might assume that they are not fully considering the current "real world" security requirements of the United States with respect to the ABM Treaty and TMD. Both schools of thought should thoroughly examine all aspects of their positions: costs, benefits, long-term implications and the basic educated logic of their arguments. A logical first step in

determining the stakes the United States and Russia currently have in the treaty would be to discuss exactly what the ABM Treaty signifies in 1995.

A. THE MEANING OF THE ABM TREATY IN 1995

Proponents of “traditional” interpretations of the treaty assert that it remains the “cornerstone” of strategic arms control. To support this assertion they cite Russian statements linking continued U.S. adherence to the ABM Treaty to Moscow’s continued adherence to START I (START I Treaty 1991, 366) and presumably the future ratification of START II. According to the first school of thought (the ABM Treaty supporters), such linkage means that any change to or withdrawal from the ABM Treaty could lead to the collapse of the START I regime and the loss of START II, heralding a return to a strategic arms competition between the United States and Russia.

In the opinion of a Russian Official, an assistant to a conservative member of the State Duma of the Federal Assembly of the Russian Federation, this contention is flawed in two respects. First, Russia is not economically capable of resuming a strategic arms competition with the United States. Second, this official estimates that there is a 60% probability that the Duma will not ratify START II prior to 1997 irregardless of the disposition of the ABM Treaty, due to the late date at which President Yeltsin submitted the treaty for ratification and the possibility of a much more “hard line” Duma being elected in the coming elections. In his opinion, it is likely that the new Duma will be eager to assert Russian nationalism and one way for it to do so would be to not ratify START II. (Interview with Russian official 20 July 95)

Although a unilateral U.S. move to reinterpret or withdraw from the ABM Treaty might provide a ready excuse for the Russians not to ratify START II and to portray the United States as the “villain” in the process, the Russian official’s statements indicate that continued Russian adherence to the START regime has less to do with the disposition of the ABM Treaty than with Russian domestic politics. This circumstance might cause a reevaluation of the position of those who support the treaty on START grounds. The characterization of the ABM Treaty as the “cornerstone” of strategic arms control, however, might be correct in the broader sense of what the treaty

represents rather than in terms of what it might have accomplished as a specific arms control agreement.

In the broad sense the treaty represented the world's two superpowers coming to an agreement for different national objectives. In the eyes of the world this agreement arguably represented the realization by these powers that their arsenals and antagonisms not only posed a threat to each other but also to the world in general and that they must act rationally and responsibly to minimize and, if possible, ultimately eliminate that threat.

This action may have been read by the world community as a distinct signal by the superpowers that they realized they had a responsibility to control the size of their nuclear arsenals. This commitment of the world's greatest nuclear powers to restrain their nuclear arsenals and antagonism makes the ABM Treaty not the "cornerstone" of strategic arms control, but of world strategic stability. In the opinion of Ambassador Sidney Graybeal, the alternate executive officer of the 1972 SALT I delegation and the first U.S. commissioner of the Standing Consultative Commission, the ABM Treaty, from the beginning, was "unquestionably about strategic stability." (Graybeal and McFate 1994, 230)

The concept of strategic stability probably had a much narrower focus in 1972 than in 1995. It was then viewed in the context of the bi-polar relationship of the United States and the Soviet Union rather than in the multi-polar global context. This narrow focus was described by Dr. Richard Falkenrath, a post-doctoral Research Fellow at the Center for Science and International Affairs at Harvard University. In his opinion, the purpose of the ABM Treaty was "to create strategic stability by preventing defensive developments that provoke a countervailing offensive response" [between the United States and Soviet Union]. (Falkenrath 1994, 148) However, the ABM Treaty might be unique in that it arguably had a global context, beyond the bi-polar relationship of the two parties, from the beginning. The significance of the ABM Treaty in 1995 might reside in the contribution it could make to global strategic stability in the post-Cold War world.

Opponents of this assessment might raise objections in the context of the "seven flaws" mentioned above. They might contend that the treaty cannot contribute to strategic stability because it inhibits the ability of the United States to defend itself and its allies against emerging threats. It gives rogue nations the "upper hand." Hans Mark, a former deputy administrator of the National

Aeronautics and Space Administration (NASA), in an address to the faculty of the New Mexico Military Institute in September of 1991, cited this reasoning for his conclusion that the Treaty "is now both politically and technically obsolete and should be abrogated as soon as possible." (Mark 1991, 316) Additionally, Lt Gen. Daniel O. Graham, former Director of the Defense Intelligence Agency and advocate of withdrawal from the ABM Treaty states that:

From the standpoint of common sense it is a wonder that we care at all about that odd relic of the Cold War, the ABM Treaty, since it was a contract with an entity that no longer exists - the Soviet Union - let alone allowing it to deny the United States, and the world in general, much-needed defenses against the spread of death-dealing weapons. (Graham 1995, 20,21)

This position, taken by Mark and Graham and others who have concluded that withdrawal from the ABM Treaty is necessary for U.S. security, should be explored from the standpoint of global strategic stability. Three areas might arguably be common pivotal stakes, shared by the United States and Russia, in the maintenance of global strategic stability in the uncertain transition from the Cold War world to the 21st Century. These areas are (a) deterrence; in the bilateral United States - Russian strategic relationship and with respect to emerging threats; (b) U.S.-Russian cooperation to meet emerging regional great powers that may pose potential threats to the United States and/or Russia; and (c) WMD proliferation.

B. DETERRENCE

The ABM Treaty might serve as a confidence-builder between the United States and Russia to assure each that the other is not attempting to undermine its strategic nuclear force. The United States called for the continued maintenance of a highly capable and viable strategic nuclear deterrent in the 1994 Nuclear Posture Review (NPR). In the NPR, the administration stated that one purpose of continuing to maintain a strategic nuclear deterrent is to "hedge" against the possibility of a resurgent Russia or the failure by Russia to implement START I or START II. Additionally, the NPR identified other U.S. concerns about the post-Cold War world. In January 1994, Secretary of Defense Les Aspin referenced the NPR in his Annual Report to the President and the Congress:

Despite the new security era, the nuclear threat continues to exist. Tens of thousands of nuclear weapons remain in the republics of the former Soviet Union; custody and control over their use may be less secure now than in the past. New threats to U.S. national security have emerged as additional nations have sought to develop nuclear weapons and other weapons of mass destruction. Some of these residual and emerging threats may not be amenable to the deterrence approaches that worked during the Cold War. Consequently, these new dangers may require new responses. U.S. nuclear posture will be a critical element in responding to these new nuclear threats. (Aspin 1994, 57)

In PDD-17, President Clinton identified one of the most serious of the "new threats" referred to by Aspin as theater range ballistic missiles. Given that 75-80% of ballistic missiles possessed by countries that might be adversaries of the United States fall into the 30-300km range category with the remaining 20-25% falling into the 300-3000km range category (Hildreth 1995, 12), this was a credible decision. Countries that possess such missiles and that might pose a threat to U.S. interests include Syria, Iran, Iraq, Libya, North Korea, and China.

A credible Russian deterrent is important because the TMD and WMD proliferation situation is, in some ways, even more serious for that nation. Unlike the United States, much of Russia could be threatened with 3000km range ballistic missiles. Ringed as it is by actual and prospective nuclear powers such as China, India, and Pakistan, and potential nuclear powers such as Iran, the threat of missile attack is even more immediate for Russia than it is for America. (Spring 1991, 1) The areas in Russia susceptible to such a threat might include 80%-90% of Russian urban and industrial centers and about 50%-70% of Russian military assets. (Hildreth 1994, 16) The Cold War is over, but deterrence continues to be a key security concern of both the United States and Russia.

Among those who propose U.S. withdrawal from the ABM Treaty, this assessment of the emerging threat to Russia and the United States and the continued security utility of the ABM Treaty is not persuasive. Many in this group believe that the motives of the Russians for wanting to maintain the treaty are centered on keeping U.S. technology hamstrung under a restrictive treaty interpretation while they dominate the export market for ABM systems. The Heritage Foundation specifically charges that the Russians are actively marketing their S-300 and S-500 anti-missile systems as being better than, or at least comparable to, Patriot and THAAD. (The Heritage Foundation, Defending America: Missile Defense Plans for the Near- and Long-Term 1995, 8) If

one looks at the threat that China may pose by China in the coming decades through Russian eyes, one might question this position. The Russians might favor the ABM Treaty because they view the treaty's article IX prohibition on transferring treaty-limited systems to other states and on deploying those systems outside of each party's national territory, as a vehicle for inhibiting the acquisition of TMD technology. Russia has a stake in limiting the transfer of this technology to states such as China.

According to a Russian Official, it is in Russia's interest to bar the transfer of advanced TMD technology to prevent it from being obtained by future Russian adversaries; e.g. China. In his view, the Russian Government is concerned about what it perceives as a gradual Chinese expansion into the Russian Far East. He believes that it is possible that by the year 2010-2020 China might have nuclear parity with Russia. In this context, the Russian Government views the ABM Treaty as an instrument that might contribute to inhibiting the Chinese in acquiring ABM technology. It might thus act as a guarantor of the integrity of the Russian nuclear deterrent vis-a-vis China. (Interview with Russian official, 20 July 1995) Steven A. Hildreth, a research specialist in the Foreign Affairs and National Defense Division of the Congressional Research Service (CRS) corroborates this Russian assessment of a potential Chinese threat. Hildreth points out that one reason why the Russians might advocate imposing restrictions on TMD, even to the detriment of their own strategic defense capabilities, might be because of their perception of a future Chinese threat. (Hildreth 1994, 16) This apparent Russian concern with China might lead one to reevaluate claims as to a Russian desire to export anti-missile systems.

Since the United States and Russia face a serious threat from theater ballistic missiles, cooperation between the two countries in maintaining credible deterrent postures might be advisable. The ABM Treaty might be used as a vehicle to facilitate that cooperation in two areas: bilateral strategic deterrence between the United States and Russia, and U.S. and Russian deterrence of "rogue" unpredictable or irrational actors.

1. U.S. - Russian Bi-lateral Strategic Deterrence

The September 1994 NPR concluded that one of the primary reasons for the continued maintenance of a U.S. strategic nuclear force is to guard against the possible emergence of a hostile government in Russia or a failure of the START regime. In the press conference at which the NPR

findings were released to the public, Secretary of Defense Perry, Deputy Secretary of Defense Deutch and the Chairman of the Joint Chiefs of Staff, General Shalikashvili, all referred to this strategy as one of "hedging." This strategy suggests that the administration sees a role for the U.S. strategic nuclear force in deterring Russia from reneging on its arms control commitments or adopting a renewed hostile and competitive posture towards the United States and the West as a whole. Reflecting the end of the Cold War and the ensuing relaxation of tensions in the U.S. - Russian relationship, Secretary Perry described this deterrent posture as being based on a concept of Mutual Assured Safety (MAS) rather than Mutual Assured Destruction (MAD). (Perry at NPR press conference 22 Sept 94)

The Russian government might also see a need to maintain a deterrent posture vis-a-vis the United States. According to a Russian official, the Russian Government acknowledges that Russia is no longer a global superpower but it does believe that its deterrent posture towards the United States guarantees its continued position as a strategic nuclear superpower. (Interview with Russian official, 20 July 1995) The Russian deterrent requirement is dictated by the need of the Russian government to maintain parity in the nuclear arena with the United States for political and diplomatic reasons. This deterrent posture will ensure a qualitative and numerical parity with the United States that will contribute to the credibility of Russia as a "strategic superpower" and thus enhance Russia's credibility in dealing with security threats from other countries, such as China. (Interview with Russian official, 20 July 1995) Stephen A. Cambone, a Senior Fellow for Political-Military Studies at the Center for Strategic and International Studies in Washington, D.C., notes that the ABM Treaty and the SALT I agreement provided recognition of Russia as a superpower. In return for this recognition, the USSR agreed to moderate its policies with respect to strategic arms and its geopolitical activity. (Cambone 1994, 1) The ABM Treaty might play a role in contributing to Russia's status as a great power in its intercourse with nations that may pose a threat to it. The ABM Treaty, functioning in this manner, might enhance global strategic stability and thus be in the U.S. security interest.

If a credible bi-lateral deterrent posture between the United States and Russia remains important to both countries, it may be assumed that each country has an interest in maintaining the integrity of its strategic nuclear deterrent force. This interest may be particularly keen for Russia

because its strategic nuclear force is seen by some Russians as the only military asset that gives Russia "leverage" as a strategic superpower in international negotiations. (Interview with Russian official, 16 August 1995) This integrity would include confidence about the force's effectiveness if employed. A key factor in this might be the continued absence of strategic missile defenses capable of defending against the scale of nuclear exchange the United States and Russia could undertake under START I and START II force levels. Again, the ABM Treaty could contribute to the continued integrity of the strategic nuclear deterrents of the United States and Russia. Would this be in the net U.S. security interest?

The ABM Treaty might continue to contribute to the integrity of both countries' deterrent forces in view of the fact that START II nuclear force levels would, when reached, bring the United States and Russia down to 3,000 - 3,500 START-counted strategic warheads each. Many of these warheads would remain on strategic ballistic missiles. These numbers are roughly approximate to those possessed by these countries when the ABM Treaty was signed in 1972. At that time, the United States possessed approximately 4,000 warheads on some 1,700 strategic ballistic missiles and the Soviet Union had approximately 2,050 warheads on roughly the same number of strategic ballistic missiles. (Graybeal and McFate 1994, 231) If the ABM Treaty contributed to maintaining strategic stability at the 1972 force levels based on the reasoning of a linkage between offenses and defenses, then could it could play a role in maintaining post-Cold War U.S.-Russian strategic stability at the similar levels under START II in the year 2000? This question assumes, of course, that these force posture characteristics are significant determinants of strategic stability. This assumption may be simplistic in that it omits other political and military considerations that may have a greater bearing on strategic stability.

Although the ability of Russia to engage in an offensive-defensive arms competition with the United States today is limited, Russia could suspend its current arms reduction programs. Such an action might not herald a renewed Cold War, but it could put the future of arms control plans in jeopardy, putting a chill on U.S. - Russian relations. In such an event, the ABM Treaty and associated institutions such as the SCC might play a vital role in providing an established avenue for continued dialogue and strategic reassurance. In this manner, the treaty could make a contribution to maintaining strategic stability during this post-Cold War transition period.

The importance of maintaining the integrity of the Russian strategic nuclear deterrent force during this transition period should be put into perspective. This transitional period might be more strategically unstable than the Cold War standoff for two reasons. First, the Cold War relationship was framed by two "equally" strong players, both predictable and rational in the other's eyes. Today, one of those players has been immeasurably weakened in all respects but its strategic nuclear force. Second, geopolitically, the once formidable Soviet Union has fragmented into a multiplicity of newly independent republics and Moscow's military presence in Eastern Europe has been completely withdrawn.

The profound implications for Russian security of this changed European situation may not be readily apparent to the United States. In general, the United States regards the breakup of the USSR and the withdrawal of the Russian military presence from Eastern Europe as positive developments. However, as a Russian official has pointed out, "If the current European situation had been postulated ten years ago, Moscow would have considered itself on the brink of defeat and used nuclear weapons." (Interview with Russian official, 16 August 1995) This reflection provides food for thought about the relative precariousness of the current U.S. - Russian strategic relationship. During the Cold War, a stable relationship was built on predictability and rationality, and the "strategic threshold" could be calculated. However, today as Russia struggles to establish itself as a democracy and as nationalist forces within Russia - forces that regard the breakup of the Soviet Empire as a negative development that has left Russia weak and at the mercy of the West - compete for political power in the Russian Government and pressure that government to take a harder line in its foreign policy to show that Russia is still a great power to be reckoned with, how can one calculate that threshold. Edward D. Mansfield and Jack Snyder have pointed out that:

In today's "Weimar Russia," voters disgruntled by economic distress backed belligerent nationalists like Zhirinovsky, put ostensible liberals like President Boris Yeltsin and Foreign Minister Andrei Kozyrev on the defensive on ethnic and foreign policy issues, and contributed to the climate that led to war in Chechnya. (Mansfield and Snyder 1995, 86)

Currently there is significant tension between the United States and Russia over U.S. policy towards the Serbs in the former Yugoslavia. Could a U.S. withdrawal from the ABM Treaty - a treaty that

codified Russia's nuclear parity with the United States - add to this tension and supply "ammunition" to nationalist forces pressuring the government to challenge the United States in order to ensure respect for Russian interests? Could such a challenge take the shape that Mansfield's and Snyder's research infers that it could? These observations highlight the current precariousness of the U.S.-Russian relationship by drawing attention to the fact that although both countries have "detargeted" their strategic ballistic missiles, each country perceives a need to maintain its deterrent posture towards the other.

As the United States and Russia forge a "new political relationship" during this transition period in which a continued bilateral deterrence posture is required, there will inevitably be periods of turbulence and unease in that relationship. The Russian Duma might, for example, refuse to approve the ratification of START II or attach conditions to its ratification that the United States would find unacceptable. Or, as pointed out above, tensions may increase between the two countries over the Balkan situation. During such turbulence, the ABM Treaty, as the main element of the current bilateral arms control regime with an indefinite lifespan, might be used to bridge the gap between the "new political relationship" and the continued deterrent relationship. Such a bridge might provide a "thread of continuity" that would prevent the two countries from falling into a "cool peace" or a new crisis environment and might facilitate the building of trust, confidence and cooperation within the framework of a post-Cold War detente. The ABM Treaty might, in other words, be a viable element in the mix of strategic force levels and arms control regimes that might support a successful post-Cold War bilateral deterrence relationship between the United States and Russia.

2. U.S. and Russian Deterrence of "Rogue" Unpredictable or Irrational Actors

Deterrence also plays a role in the area of U.S. and Russian policy towards emerging threats. In his Annual Report to the President and the Congress in January 1994, Secretary of Defense Les Aspin stated that "...more than 25 countries, many of which are adversaries of the United States and its allies, possess or may be developing nuclear, chemical, or biological weapons." (Aspin 1994, 51) Such states, typified by Iraq, Iran, Libya and North Korea, might be led by unpredictable or irrational actors who are determined to acquire a weapons of mass destruction (WMD) capability. Nonproliferation policies might prove in the future, as in the past, to be inadequate to prevent

determined "rogue" states from acquiring WMD. It is important to realize that the use or threat of use of WMD by a "rogue" state against Russia might pose almost as serious a threat to U.S. security as the use or threat of use of WMD by that "rogue" state against the United States. In such a case, the potential for blackmail of Russia or a preemptive response by Russia to eliminate the threat might, in some cases, hold the same dangers and uncertainties as if the United States was the subject of the threatened use or actual use of WMD. Both the United States and Russia have a common security interest in each maintaining a credible deterrent against such countries and their irrational, unpredictable leaders. Iraq is a classic example of a determined proliferant nation that was able to come close to obtaining an operational nuclear capability, even while ostensibly supporting the NPT regime. Iraq also had an extensive chemical and biological weapons program in progress.

Aspin's comments in the 1994 Annual Report to the President and the Congress reflected concern about the U.S. deterrence posture in the post-Cold War world, including how best to shape it to be effective against the unpredictable actors who might acquire WMD. Various official policy statements - the NPR published in the fall of 1994, the National Security Strategy for 1994, and the National Military Strategy of 1995 - have made it clear that the U.S. Government considers the maintenance of a credible strategic nuclear capability a critical component of the U.S. strategy. Deputy Secretary of Defense John Deutch in September 1994 stated:

Bill Clinton is clear on the fact that nuclear weapons remain part of the post-Cold War world that we have to deal with. It's important that we retain the nuclear forces necessary to deter any possible outcome. (Deutch, NPR press conference, September 22, 1994)

This statement was consistent with the President's statement in the National Security Strategy published in July 1994 that:

We will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with access to strategic nuclear forces from acting against our vital interests and to convince it that seeking a nuclear advantage would be futile. Therefore we will continue to maintain nuclear forces of sufficient size and capability to hold at risk a broad range of assets valued by such political and military leaders. (Clinton, National Security Strategy of the United States, July 1994)

In the National Military Strategy of the United States of America 1995, the Chairman of the Joint Chiefs of Staff stated that:

The highest priority of our military strategy is to deter a nuclear attack against our nation and allies. Our survival and the freedom of action that we need to protect extended national interests depend upon strategic and nonstrategic nuclear forces and their associated command, control and communications. (Shalikashvili, National Military Strategy of the United States of America 1995, 10)

The ABM Treaty could play a role in contributing to a credible U.S. and Russian deterrent posture against "rogue" states by acting as a signal that the two predominant nuclear powers are committed to maintaining the effectiveness and credibility of each other's deterrent capability. Such a signal might serve to put "rogue" proliferant states on notice that it would be futile for them to attempt to use or threaten use of their WMD capability to blackmail the United States, Russia or their allies because the U.S. and Russian strategic deterrents would (a) be capable of being used with near surgical precision and (b) there would be no possibility that such a response could be intercepted by a strategic missile defense system such as SDI or GPALS. A credible deterrent in the hands of both the United States and Russia might also contribute to preventing a "rogue" or other minor state from playing the United States and Russia off against one another in a crisis.

The maintenance of credible U.S. and Russian deterrent postures might be particularly relevant if one reasons that once a "rogue" proliferant state achieves a comprehensive WMD capability, nonproliferation efforts with respect to that state are irrelevant; credible deterrence or active intervention might be the only choices left to contain the threat. Three factors might prevent a country from engaging in action to preempt a "rogue" nation's WMD capability. First, there might be a high political risk involved for any president who committed U.S. forces to such a military action. If casualties were high or the mission failed, then a severe public backlash might be felt at the ballot-box or possibly in the form of demonstrations. Furthermore, it might be difficult - or even impossible - for a president to convince the American people of the necessity to risk the lives of U.S. military personnel in an action against a country that is seemingly "minding its own business."

Second, even if the immediate military objectives of a preemptive counter-proliferation strike were met, it would not guarantee that the "rogue" nation's WMD program would be stopped.

An example of such an event was the Israeli air strike on the Iraqi Osiraq nuclear facility in 1981. Although the successful strike slowed the Iraqi program, Saddam Hussein merely adapted by concentrating greater attention on concealment, camouflage, deception and diversification of technologies used, to assure future secrecy for his nuclear weapons program. (Bailey 1993, 28) Consequently, ten years later, Hussein was on the verge of achieving a nuclear weapons capability.

Finally, a president might be deterred from undertaking preemptive action because of the destruction that might be wreaked by the target nation in a conventional retaliatory strike. This might be a distinct element in the North Korean nuclear standoff with the United States. A preemptive U.S. counter-proliferation strike on North Korea might or might not be successful. In either event, the likelihood of a North Korean conventional retaliatory attack might be very high. Such retaliation would cause immense destruction and high numbers of deaths on the Korean Peninsula before North Korea could be defeated. The possibility of such an occurrence might prevent a President from taking military action. In essence, such a situation presents a U.S. president with the dilemma of being "self-deterred" in his counter-proliferation efforts.

In light of these three factors - that in many cases might also apply to Russia - once a determined "rogue" proliferant nation acquires a nuclear capability, nonproliferation and even counter-proliferation strategies might become irrelevant. Instead, a highly credible deterrent strategy might be the only feasible option left for the United States or Russia to prevent that state from ever employing its WMD capability. The maintenance of the ABM Treaty could serve as a signal to such "rogue" proliferators that the United States and Russia are committed to maintaining the credibility of their ICBM and SLBM forces. Such a signal would thus enhance the two countries' deterrent postures vis-a-vis "rogue" proliferators by telling them that BMD systems deployed by the United States and Russia would defeat any ballistic missile threat a "rogue" proliferant might pose but the defenses would not be credible against the U.S. or Russian strategic missile force.

C. STRATEGIC BALANCING

It might be reasoned that deterring potential adversaries is not enough to maintain strategic stability. A balancing strategy should also be employed to balance the deterred country's growth or influence so that one might engage that country in dialogue, trade and cooperation. Such a balancing

strategy against a significant emerging power might be unrealistic for a single country to carry out; it might need allies. As long as the United States remains a world power, it will seek allies to balance emerging threats to international security. Could the new U.S. - Russian relationship offer America an opportunity to acquire a new ally in this endeavor?

As the gap between the emerging new political relationship and the continuing deterrent relationship is bridged during this post-Cold War transition period, could strategic balancing against new threats to international security be a concern to both the United States and Russia? As the new political relationship matures and becomes more defined, a long-term goal for both countries might be to act in a manner that complements the other's strengths: Russia as a continental power and the United States as a maritime power. Such a relationship might be compared to the British-Russian relationship prior to World War I. Such a relationship might contribute to international security by providing a check on the rise of any future aspirant to global hegemony and also on the potential of China to become an East Asian hegemon.

The ABM Treaty might facilitate the development of this relationship in two ways: (a) by bridging the gap between the new political relationship and the continuing deterrent relationship between them and thus serving as a confidence-builder in overcoming distrust to allow the growth and maturation of the new political relationship; and (b) by ensuring continued Russian strategic credibility as a world player by providing continued strategic parity with the United States. This could benefit U.S. international security interests by enhancing Russia's credibility as a balancer against future Chinese expansion or adventurism.

Any country can be expected to act in its own interests. Therefore, if Russia believes it is being pushed or squeezed into a position dangerous to its security at one of the weakest points in its long history, it could be expected to rethink its strategic relationships and realign them to create a better security arrangement. If the United States misses the opportunity to build a new relationship with Russia, a possible result might be some type of Russian alignment with China to secure its eastern borders. Although some might argue that such an action by Russia would be illogical, given the turbulence in Russo-Chinese relations over the past 350 years, there is precedent for Russia taking such action in response to U.S. policy initiatives.

In the view of some, the Soviet export of nuclear technology, beginning in the mid-1950s, paralleled the U.S.-initiated "Atoms for Peace" program. According to Peter R. Lavoy, an expert on nonproliferation issues,

After the U.S. AEC decided in December 1954 to release certain atomic information, Moscow quickly followed suit, asserting a month later that it too would share the technical data it had collected during the operation of its first atomic power plant. Nuclear technology power thus became a key part of the cold war competition. (Lavoy cited in Breslauer and Tetlock eds. 1991, 755)

On October 15, 1957, the Soviets and the Chinese signed the New Defense Technical Accord in which the Soviets agreed to supply China with a prototype atom bomb as well as two R-2 missiles and related technical data. (Norris, Burrows and Fieldhouse 1994, 331) This action, in the opinion of George Bunn, a former U.S. arms control negotiator, was meant to match the aid the U.S. was giving Great Britain during the same period. (G. Bunn 1992, 63) This U.S. nuclear support to Great Britain, after having been severely limited by the Atomic Energy Act of 1946, began in the context of Atoms for Peace in December 1954 and expanded into the reestablishment of full nuclear cooperation, in the wake of the 1956 Suez crisis, in early 1957. This full cooperation included the adaptation of British aircraft to carry U.S. nuclear weapons, the storage of U.S. nuclear weapons on British territory and the coordination of strategic targeting between the United States and Great Britain. (Norris, Burrows and Fieldhouse 1994, 43)

The singular difference between the respective U.S. and Soviet cooperative efforts was that the Soviet effort with China ended when the USSR "unilaterally tore up all agreements and contracts it had signed with China" in July 1960. (Norris, Burrows and Fieldhouse 1994, 332) This included cancellation of the delivery of the prototype atom bomb. A possible reason for this break in cooperation was that the Soviets came to realize that the Chinese wanted an independent nuclear force and would never agree to joint or coordinated control of the nuclear weapons with the Soviets. (CIA, Deterioration of Sino-Soviet Relations, 1966, 43)

Was the Soviet nuclear assistance to China in the 1950s an effort to balance the U.S. nuclear alignment with Britain? Although the Sino-Soviet nuclear cooperative effort failed, could it be a precedent for similar Russian action in the future if Moscow believes it is being put at a disadvantage

in the international arena? A future Sino-Russian alignment might take the form of the 1950 Treaty of Friendship, Alliance and Mutual Assistance, or it could more readily take the form of Russian-Chinese cooperation against the United States in the UN Security Council; or Russian political and diplomatic support for China in its policy vis-a-vis North Korea; or possibly Russian acquiescence in Chinese expansion into Central Asia. (Interview with Russian official, 16 August 1995)

Given that the Russians probably regard the ABM Treaty as a guarantor of their strategic parity with the United States, could they regard its abrogation or unilateral reinterpretation by the United States as an indication that they are being pushed or squeezed into a disadvantageous position during a period of great weakness? At a time when the United States might need to cultivate a cooperative relationship with Russia to balance the growth and influence of China, can it afford to push that potential ally away?

D. NONPROLIFERATION

There is strong evidence of a serious threat to the United States from the proliferation of ballistic missile and WMD technology. (Bottom-Up Review 1993, 44) In an address at the Monterey Institute of International Studies on August 20, 1995, Senator Sam Nunn (D. Ga.) stated that "weapons of mass destruction - nuclear, chemical, biological - remain the number one national security threat to the United States." (Howe 1995, 1A) However, Russia faces the same threat. The ABM Treaty might play a role as a "confidence-builder" between the two countries as they seek to meet this threat and at the same time transcend the Cold War mind set of suspicion and competition.

Although the ABM Treaty followed the NPT, the perception of the U.S. and Russian commitment to international security might be viewed as significant today by those countries that have agreed to remain non-nuclear weapons states. In this context, arguably, PDD-17 might have made some contribution to bringing about the overwhelming vote for indefinite extension of the NPT.

A withdrawal from this commitment - arguably symbolized by the ABM Treaty - by the United States and/or Russia might be viewed by some governments as a bellwether, signaling a withdrawal from U.S. and/or Russian commitment to international security and strategic stability, and thus heralding a new "self-help"-oriented world of multipolar arms competitions and proliferation of

weapons of mass destruction. Indeed, Secretary of Defense Aspin made reference to this in his Annual Report to the President and the Congress in January 1994 when he stated:

the United States cannot ignore the fact that its military posture and particularly, its nuclear posture may influence the decisions by others to either acquire or forego their own nuclear weapons and other weapons of mass destruction. (Aspin 1994, 57)

Secretary Aspin's statement reflects the major security concern that the United States has with respect to WMD proliferation in general and nuclear proliferation in particular in the wake of the Cold War. Furthermore, Aspin's statement manifested this concern in two respects: first, by the desire to prevent proliferation of WMD to "rogue" states such as Syria, Libya, North Korea, Iraq, Iran and Algeria; and second, by the desire to assure "law-abiding" states that they do not need to acquire WMD out of a sense that such weapons are required for their security.

The former Speaker of the U.S. House of Representatives, Thomas P. "Tip" O'Neil, is famous for his saying that "all politics is local." In that vein, in the view of many international security experts, "all security is regional." A perceived withdrawal of the United States and Russia from their commitment to international security could weaken nonproliferation efforts and possibly result in Japan and Germany deciding to develop and deploy a nuclear deterrent. The likely response of such countries cannot easily be predicted, but such an eventuality could have profound consequences for security and stability in the East Asia-Pacific region and in Europe.

Kathleen C. Bailey, an expert on nonproliferation issues at Lawrence Livermore National Laboratory in Livermore, Ca, addresses similar concerns when she states that:

In the case of the United States and Russia, total nuclear disarmament is highly unlikely in the near or midterm future, although both will continue to identify the concept as a goal in an ideal world. Nuclear weapons are central to providing security to allies and obviating the need for those countries to develop their own nuclear arsenals. For example, as long as NATO has a nuclear umbrella, Germany is less likely to perceive a need for or have the freedom to develop its own nuclear arsenal. Russia's nuclear umbrella over Kazakhstan obviates arguments that might be made in that country's political circles for retaining or developing nuclear weapons. (Bailey 1993, 54)

Bailey's observation suggests that it is important for Russia to maintain a viable and credible strategic nuclear deterrent for nonproliferation considerations comparable to those that apply to the United States. These considerations include the ability to deter WMD use by "rogue" states and to provide credible security guarantees to "law-abiding" states so they will not feel the need to acquire WMD. Implicit in this observation is the suggestion that in this post-Cold War world of proliferation and uncertainty, a viable and credible Russian deterrent is almost as much in U.S. interests as it is in Russia's interests. In this vein, Senator Sam Nunn (D Ga.) pointed out in an address on nonproliferation issues at the Monterey Institute of International Studies on August 20, 1995 that

it could be as dangerous to have too few nuclear weapons as it is to have too many: reducing warheads to a few hundred in number might tempt another country to launch a first-strike attack. (Howe 1995, 10A)

Apparently, Senator Nunn believes that for U.S. and Russian strategic deterrents to be credible, each arsenal must be of a certain minimum size. Otherwise, there is a risk that either the United States or Russia - or more likely some third party "rogue" actor - might attempt a first strike.

As the United States and Russia adjust their strategic postures to reflect their changed relationship and emerging threats, the ABM Treaty can serve as a "confidence-builder" between the two former adversaries. The cooperation that might be signified by the ABM Treaty might also serve as a signal to "rogue" proliferators to restrain their ambitions and "think thrice" before using or threatening the use of WMD to achieve their goals. Additionally, it might assure the countries that rely on the major nuclear powers for security guarantees that they need not acquire WMD for their defense because they can be secure under a credible and viable nuclear umbrella.

VI. CONCLUSION

This thesis has focused on the following question: "Is the ABM Treaty useful to U.S. national security interests in the post-Cold War world?" To analyze this question, four areas were examined in detail: the origins of the ABM Treaty (Chapter II), the Domestic Politics of the ABM Treaty (Chapter III), the British, French and Chinese Stakes in the ABM Treaty (Chapter IV) and U.S. and Russian Post-Cold War Stakes in the ABM Treaty (Chapter V).

Additionally, evaluative criteria composed of three questions (or elements) were established. These criteria were used to assess the findings of these chapters as to whether the ABM Treaty still holds utility for U.S. national security interests. As long as the three criteria were met collectively by the findings in the four areas examined, the treaty would be determined to be still useful to U.S. national security interests in the post-Cold War world. The three criteria were: (a) whether the ABM Treaty can contribute to a constructive dialogue between the United States and Russia and to the formation of a "new political relationship" between the United States and Russia; (b) whether the ABM Treaty can contribute to strategic stability in the post-Cold War world; and (c) whether the ABM Treaty and TMD are compatible. Based on these criteria, this thesis concludes that the ABM Treaty is useful to U.S. national security interests in the post-Cold War world.

A. THE ABM TREATY AND THE U.S.-RUSSIAN POST-COLD WAR DIALOGUE

Chapter II pointed out that the ABM Treaty constituted what some might characterize as a common "win-win" solution to the United States' and the Soviet Union's pursuit of dissimilar goals. The Soviet Union saw the treaty as an opportunity to restrain U.S. technology in an area that it believed itself to be inferior. The United States saw the treaty as an opportunity to (a) strictly limit the scope of strategic defenses so large amounts of money would not have to be expended in a defensive arms competition with the Soviets and (b) to preserve the survivability of the U.S. strategic retaliatory force. Although these goals were dissimilar, the United States and Soviet Union were able to arrive at the common solution of the ABM Treaty through a "backchannel" dialogue between the U.S. National Security Advisor, Henry Kissinger, and the Soviet Ambassador to the United States, Anatoly Dobrynin. The role of the Kissinger-Dobrynin "backchannel" negotiation - it essentially

made the ABM Treaty possible by coming to a compromise on the U.S. demand for offensive-defensive arms linkage in the SALT I negotiations - could be characterized as the first indicator that the treaty could be an avenue for dialogue between the two countries.

The Standing Consultative Commission (SCC) has been successfully used by the United States as an avenue of dialogue to amend the treaty both in writing and in interpretation: first in the Protocol of 1974, which reduced the number of allowed ABM sites to one, and next in 1978, when the United States and the Soviet Union agreed that the flight characteristics of the SS-N-6 would delineate the minimum speed and range of a strategic ballistic missile for arms control purposes. Additionally, the SCC has provided a forum for both countries to challenge the other's compliance with the treaty. In 1989 the Soviet Government acknowledged that its large phased-array radar (LPR) at Krasnoyarsk was indeed in violation of the treaty. The U.S. had challenged the treaty-compliance of the radar for years in the SCC. Currently the SCC is the forum for ongoing U.S.-Russian talks to clarify the ABM Treaty's demarcation between strategic ballistic missiles and theater ballistic missiles, thereby determining the treaty-compliance of U.S. and Russian TMD systems. Although some might argue that these talks have been handled badly, that criticism should not apply to the SCC as an institution and obscure its utility as a forum for constructive dialogue between the United States and Russia. The success of the original ABM Treaty negotiations and the success of the SCC as a forum for dialogue can arguably be used as examples of the success of Nixon's and Kissinger's long-term goal of detente - to establish a framework for dialogue that is still needed in U.S.-Russian relations.

Some ABM Treaty opponents assert that the treaty is flawed in that it has no expiration date. However, chapter V points out that this feature may not be a flaw. The only other strategic arms control agreement currently in effect with Russia is START I, which has a fifteen year lifespan. Although the ability of Russia to engage in an offensive-defensive arms competition with the United States today is limited, Russia could suspend its current arms reduction programs required under START I. Such an action might not herald a renewed Cold War, but it could put future arms control plans - such as START II or III - in jeopardy, putting a chill on U.S.-Russian relations. In such an event, the ABM Treaty and associated institutions such as the SCC might play a vital role in providing an established avenue for continued dialogue between the two countries.

As the United States and Russia forge a “new political relationship” in the wake of the past Cold War antagonism, there will inevitably be periods of turbulence and unease in that relationship. The Russian Duma might, for example, refuse to approve the ratification of START II or attach conditions to its ratification that the United States would find unacceptable. Or, as chapter V pointed out, the current U.S.-Russian tensions over U.S. policy towards the Serbs in the former Yugoslavia could reach higher levels. During such turbulence, the ABM Treaty, as the main element of the current bilateral arms control regime with an indefinite lifespan, might be used to bridge the gap between the “new political relationship” and the continued deterrent relationship. Such a bridge might provide a “thread of continuity” that would prevent the two countries from falling into a “cool peace” or a new crisis environment and might facilitate a dialogue that would result in the building of trust, confidence and cooperation between the two nations: a dialogue carried on within the framework of a post-Cold War detente.

B. THE ABM TREATY AND POST-COLD WAR STRATEGIC STABILITY

Chapter IV reviewed the impact of the ABM Treaty in shaping the strategic defense and nuclear weapons policies of the world's other three acknowledged nuclear powers - Britain, France and China.

1. Britain and France

With respect to Britain and France - important and longstanding U.S. allies - as during the Cold War, both of these countries view the treaty as a guarantor of the integrity (and effectiveness) of their small strategic nuclear deterrents. Their concerns about preserving the integrity of their deterrents reside in the necessity - as they see it - to maintain a continued deterrent posture against Russia as a “hedge” against a possible resurgence of the former Cold War competition resulting from political unrest or “meltdown” in that country. Additionally, Britain and France are concerned about what they view as the need to deter “rogue” nations from employing WMD against them. Both Britain and France recognize the need for some level of TMD. In their view, however, if the ABM Treaty was abrogated or simply made irrelevant, their ability to maintain credible deterrents could be impaired. The effectiveness of their relatively small strategic missile forces could be degraded by increased Russian defenses. The credibility of their deterrents vis-a-vis “rogue” states might be

negated by the existence of a GPALS type system that might be used to destroy any ballistic missiles that Britain or France might launch or threaten to launch against such states.

While the United States cannot allow the security interests of its allies to dictate decisions that might be detrimental to U.S. security, it must be fully aware of its allies' interests. In this manner, when U.S. and allied interests coincide, we can fully support one another, instead of needlessly creating friction in the allied relationship. The British and French concerns related to the ABM Treaty in the early post-Cold War world are arguably compatible with U.S. security policy.

The Nuclear Posture Review cites two reasons for maintaining the U.S. strategic nuclear deterrent that are similar to the British and French concerns. In the NPR, President Clinton made the following statement as to why the United States has nuclear weapons:

We will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with access to strategic nuclear forces from acting against our vital interests and to convince it that seeking a nuclear advantage would be futile. Therefore we will continue to maintain nuclear forces of sufficient size and capability to hold at risk a broad range of assets valued by such political and military leaders. (Clinton statement in the Nuclear Posture Review, 1994, 2)

Additionally, the NPR states that the U.S. nuclear deterrent will constitute a "hedge" in case "political relations with Russia change for the worse" or if "START I and START II are not fully implemented." (Nuclear Posture Review, September 1994, 19) Additionally, the National Military Strategy of the United States of America states that:

The highest priority of our military strategy is to deter a nuclear attack against our Nation and allies. Our survival and the freedom of action that we need to protect extended national interests depend upon strategic and nonstrategic nuclear forces and their associated command, control, and communications. (National Military Strategy of the United States of America 1995, 10)

This policy document goes on to state that:

Our regional strategies, and the global strategy of which they are a part, are built on the foundation of strong and effective alliances. Our goal of a stable, multipolar world hinges on both the ability to preserve and adapt our existing alliances to

challenges we confront today and anticipate tomorrow. (National Military Strategy of the United States of America 1995, 10)

The United States cannot maintain international strategic stability on its own. It needs strong and reliable allies who share the same goals. Britain and France, with the strength symbolized by their strategic nuclear arsenals, can play a role in maintaining strategic stability. In this case, the ABM Treaty can be useful to U.S. national security interests by acting as a guarantor of the credibility and integrity of those arsenals and thus enable Britain and France to play a role in maintaining strategic stability.

2. China

China cannot be classified as a U.S. ally. However, it cannot be accurately classified as a U.S. adversary either. Chapter IV found that China has acted with a double standard in its nuclear arms control policies and is currently modernizing its nuclear arsenal to include improved command and control capabilities and MIRVing of some of its ICBMs. Additionally, China is facing challenges that it believes require the expansion of its influence in the South China Sea and in former Soviet Central Asia. As China's economy continues to grow, its influence and power in East Asia will continue to expand. China presents itself as an alternative to the status quo represented by U.S. influence and power in the region.

The main stake that China has in the ABM Treaty is thus for propaganda value. Based on their past history of "moving the goalposts" with respect to their nuclear weapons policy, the Chinese would probably exploit any U.S. action to abrogate or make irrelevant the ABM Treaty by describing such action as a U.S. move to once more subject China to "nuclear blackmail." As the post-Deng leadership struggles to consolidate power and the military continues to gain a greater hand in governmental affairs, with the Chinese nationalism card played to garner populist support, the new Chinese leadership might use a marginalization of the ABM Treaty as an excuse to pursue a more aggressive foreign policy in the East Asia-Pacific region - on the pretext of "self-defense" against U.S. hegemony.

There are two reasons not to give China such a propaganda victory. First, as asserted above, the ABM Treaty can be used as a vehicle to broaden U.S.-Russian cooperation. This cooperation might extend to moderating Chinese actions in East and Central Asia. Secondly, the continuation

of the ABM Treaty in no way hinders the U.S. development and deployment of TMD systems. Therefore, the proper measures can be taken for the defense of U.S. interests in East Asia with the ABM Treaty in place.

C. THE COMPATIBILITY OF THE ABM TREATY AND THEATER MISSILE DEFENSE

Chapters III and V found that TMD is compatible with the ABM Treaty for two reasons. First, TMD systems are not limited by the treaty. Article VI(a) stipulates that the parties to the treaty must not give non-ABM components the “capabilities to counter strategic ballistic missiles or their elements in flight trajectory,” and they must not be tested “in an ABM mode.” Ambassador Graybeal explains the reasoning behind Article VI(a) as the following:

During the ABM Treaty negotiations, the U.S. Government was concerned about the USSR’s potential for upgrading its extensive SAM systems to give them ABM capabilities. Many portions of the treaty, especially article VI(a), were designed to prohibit, or at least to inhibit, that upgrading. Today, this concern is reflected in the capabilities of the Russian SA-12 (Antey S-300V)... system. (Graybeal and McFate 1994, 235)

The current U.S. TMD systems being developed are not designed to counter modern Russian strategic ballistic missiles, nor does the United States intend to test them against such missiles. Rather these systems are designed to counter ballistic missiles with ranges up to 3500km (2410 miles). Missiles of this range have a corresponding re-entry velocity of approximately 5km/sec. (Hildreth 1994, 10) According to General Malcolm R. O’Neill, the Director of the BMDO, the Russians have agreed that the theater ballistic missile threat includes missiles of up to this range. (O’Neill 1995, 26) General O’Neill also states that:

Restricting tests of TMD systems to missiles of this range will go a long way toward ensuring that TMD systems do not have capability against strategic ballistic missiles. The importance of this point is sometimes overlooked. As the developer, I would have significant difficulty convincing a war-fighter - or the U.S. Congress - that a very sophisticated defensive system such as mine would have capability it had never demonstrated. (O’Neill 1995, 26)

General O'Neill's reference to "demonstrated capability" is very important. Article VI(a) prohibits giving non-ABM systems ABM capabilities and testing those systems in an "ABM mode." Once again, this is not the case with U.S. TMD systems: they are not being given ABM capabilities and they will not be tested against strategic ballistic missiles included under current U.S. and Russian strategic arms control agreements. TMD opponents claim that U.S. TMD systems under development are being given ABM capabilities and are therefore in violation of Article VI(a). They base this claim on computer simulations.

Based on U.S. computer simulations, the Administration has determined that the THAAD system could possess a 'significant' intercept probability against some strategic re-entry vehicles, but only after the full external sensing system is in place, including battle management software to receive cueing information from external sensor sources. (Graybeal 1995, 3)

Ambassador Graybeal contends that such computer simulations are invalid in determining the capabilities of TMD systems against strategic ballistic missiles because the ABM Treaty stipulates that the verification means for the treaty is NTM alone. Because "the treaty is verified by NTM, it is demonstrated capabilities which count, not laboratory activities such as computer simulations." (Graybeal 1995, 3)

Additionally, he asserts that external sensors, including space-based sensors, used to provide cueing data to TMD systems, are not prohibited by the ABM Treaty because such sensors are not providing the data directly to the interceptor missile but rather to a battle management center for further transmission to the interceptor. Graybeal states that:

In my view, such use is not a treaty compliance issue because data from external sensors are not limited by the ABM Treaty. External sensors are adjuncts to ABM systems and not substitutes for ABM radars. The only way an external sensor substitutes for that radar; and the only way it can substitute for the radar is if it communicates directly to an ABM interceptor in flight. Data from external sensors can be sent to a battle management center such as Cheyenne Mountain, and then used in any manner, for example, upgrading the target object map or the interceptor, to improve the capabilities of the ABM system. This utilization of data from external sensors applies to both ABM systems and TMD systems. (Graybeal 1995, 2)

The second reason that TMD is compatible with the ABM Treaty is that a demarcation between strategic and tactical and/or theater ballistic missiles has always existed with respect to the ABM Treaty. When the ABM Treaty was signed, the shortest range Soviet strategic ballistic missile included under the Interim Offensive Forces Agreement was the SS-N-6 SLBM with a range of approximately 3000km (1900 miles). In the never-ratified SALT II, the SS-N-6 was also labeled a strategic ballistic missile. (Graybeal and McFate 1994, 236) Additionally, unclassified accounts of the Protocol of 1978 say that in that agreement the United States and Soviet Union agreed that a strategic ballistic missile is one whose range and flight characteristics match or exceed those of the SS-N-6, which was the shortest-range strategic ballistic missile deployed on either side. (Removing the ABM Treaty Obstacle to U.S. and Soviet Defenses against Missiles, 1991, 10) "Shorter range tactical and theater ballistic missiles, whose ranges vary considerably from 30 to 3,000 kilometers, were not captured by the ABM Treaty or U.S.-Soviet strategic nuclear arms control agreements" (Hildreth 1994, 1) and therefore defenses against such missiles were not considered strategic and were permitted. According to Ambassador Graybeal:

The few remaining SS-N-6 missiles will probably be removed from Russian strategic forces in the mid 1990s, and thus the remaining strategic ballistic missiles in both the United States and Russia will be "modern" strategic ballistic missiles, with ranges on the order of 7000 to 9000km and maximum velocities over 7.0km/sec. (Graybeal and McFate 1994, 236)

Additionally, Steven Hildreth asserts that:

Although a precise definition of an SBM [strategic ballistic missile] was not included, the parties generally agreed that for purposes of the ABM Treaty, SBMs were missiles captured by other strategic nuclear arms control agreements. (Hildreth 1994, 1)

If one combines Ambassador Graybeal's observation and Hildreth's assertion, then one can come to the conclusion that the ballistic missiles that currently pose the theater threat the administration has identified, do not have the capabilities of the modern U.S. and Russian strategic ballistic missiles that are limited by current U.S.-Russian strategic arms control agreements. Therefore, TMD systems

designed to counter the TBM threat as defined by missiles with ranges of up to 3500km and re-entry velocities of up to 5km/sec, do not violate the ABM Treaty nor do they pose a threat to the U.S. and Russian strategic missile forces. This conclusion implies that the current demarcation negotiations in the SCC are unnecessary since the precedent for the "sought after" demarcation already exists.

D. RECOMMENDATIONS

This thesis makes three recommendations based on its findings.

1. Maintain the ABM Treaty as it is Currently Written

The findings of this thesis indicate that the treaty is still useful for the national security interests of the United States and that effective TMD systems required to meet emerging threats to those interests are fully compatible with the treaty. Negotiating written clarifications to the treaty might eliminate the flexibility that the treaty currently affords the United States in its missile defense programs and in challenging the treaty-compliance of Russian programs.

2. Do Not Multilateralize the ABM Treaty

Although the findings of this thesis indicate that the ABM Treaty has significance for other countries not party to it, its principal significance is for the future relationship of the two parties. The parties are the only countries capable of fielding large numbers of ICBM and SLBM forces. The multilateralization of the treaty might result in the use of the SCC as a forum for certain former Soviet states to settle old political scores with Russia. Moreover, it might lead to additional constraints on U.S. flexibility, because states in addition to Russia would have to approve new agreed interpretations of the treaty.

3. Revise the "Foster Box"

The "Foster Box" guidance should be revised to reflect the increase in range and velocity of modern strategic ballistic missiles over the past 23 years since the ABM Treaty came into force. Since modern strategic ballistic missiles permitted under START I - the only strategic offensive arms treaty in force between the United State and Russia - have ranges of from 7000km - 9000km and re-entry velocities in excess of 7.0km/sec, and the current TBM threat is composed of missiles with ranges from 30km - 3500km and re-entry velocities of up to 5km/sec, the revised "Foster Box" should permit testing of TMD systems against targets traveling at speeds of up to 5km/sec. Such a

revision would pose no threat to the effectiveness of the modern U.S. and Russian ICBM and SLBM forces. Additionally, Stephen A. Cambone asserts that such an action would have several advantages:

1. It would be consistent with past U.S. treaty practices and is one understood by, but not subject to agreement by, Russia.
2. Such action would continue the practice of consultation with the Congress while preserving the administration's prerogative to set compliance standards.
3. Such action would not constitute an interpretation of U.S. treaty obligations but rather it would clarify terms left without definition in the ABM Treaty: "test in an ABM mode," "capabilities to counter," and "strategic ballistic missile," in order that flexibility can be maintained for the United States as it discharges its treaty obligations.
4. This action would leave the Russians in the position of deciding whether U.S. practices are of concern to them, which is in fact the procedure established by the ABM Treaty and the reason for the SCC. (Cambone 1994, 5)

Such action would, moreover, provide an avenue for the United States to extricate itself from the SCC demarcation negotiations on the basis of the Clinton-Yeltsin Joint TMD Communique issued during the May 1995 Moscow Summit. Potentially, the United States might be required to make some concession dealing with START I or the provisions of the unratified START II agreement in order to prevent the Russians from losing face as a result of such an action. However, such a concession might not be necessary and should not be pursued without due analysis.

Unilaterally revising the "Foster Box" - itself an internal U.S. guidance concept - would be well worth the benefits that would arguably result: the determination that U.S. TMD systems are fully compatible with the ABM Treaty; the continuation of the ABM Treaty as an effective mechanism for post-Cold War strategic stability; and the continued opportunity for the ABM Treaty to contribute to the formation of a "new political relationship" between the United States and Russia built on cooperation and trust. All of these benefits are in the post-Cold War national security interests of the United States of America.

BIBLIOGRAPHY

- , "ABM Treaty Clarification Talks Postponed." Arms Control Today. March 1995.
- , A National Security Strategy of Engagement and Enlargement. The White House, Washington, D.C., U.S. Government Printing Office, 1995.
- , "A New Threat to the ABM Treaty: The Administration's TMD Proposal." Arms Control Today. January/February 1994.
- , "Administration Backs Narrow Interpretation of ABM Treaty." Arms Control Today. September 1993.
- Arquilla, John. "Missiles, Subs ... and Mao." Strategic Review. Spring 1995.
- , Ballistic Missile Proliferation: An Emerging Threat. Arlington, Va., Systems Planning Corporation Press, 1992.
- Barrillot, Bruno. "French Finesse Nuclear Future." Bulletin of the Atomic Scientists. September 1992.
- Baucom, Donald R. The Origins of SDI, 1944-1983. Lawrence, KS., University of Kansas Press, 1992.
- Baum, Julian. "Idling Threat." Far Eastern Economic Review. April 13, 1995.
- Bell, Robert G. "Ballistic Missile Defense: An Administration Perspective." INSS Strategic Forum. July 1995.
- Bennett, Paul R. The Soviet Union and Arms Control: Negotiating Strategy and Tactics. New York, Praeger Publishers, 1989.
- Binnendijk, Hans and Patrick M. Cronin. "Asia-Pacific Challenges." Joint Force Quarterly. Spring 1995.
- Bodansky, Yossef. "The rise of the Trans-Asian Axis: Is it the Basis of New Confrontation." Defense & Foreign Affairs Strategic Policy. September 30, 1994.
- Brauch, Hans G. Ed. Star Wars and European Defense. New York, St. Martin's Press, 1987.
- Brennan, Donald G. Arms Treaties with Moscow: Unequal Terms Unevenly Applied. New York, National Strategy Information Center Inc., 1975.

Builder, Carl H. The Future of Nuclear Deterrence. Santa Monica, Ca., Rand Corporation Press, 1991.

Bunn, George. Arms Control by Committee. Stanford, Ca., Stanford University Press, 1992.

Bunn, Matthew. Foundation for the Future: The ABM Treaty and National Security. The Arms Control Association. Washington, D.C., 1990.

Caldwell, Lawrence T. Soviet Attitudes to SALT. London, Institute for Strategic Studies, 1971.

Cambone, Stephen A. Shaping the Strategic Environment: A Role for the ABM Treaty? 1994.

Carhart, Tom. "Strategic Defense at Reduced Cost." Essays on Strategy VII. 1990.

Carus, W. Seth. Ballistic Missiles in the Third World: Threat and Response. Washington, D.C., Center for Strategic and International Studies. 1990.

Chanda, Nayan. "Fear of the Dragon." Far Eastern Economic Review. April 13, 1995.

-----, "China Conducts Nuclear Test." Facts on File. October 27, 1994.

-----, "China Pressed on A-Tests." New York Times. December 12, 1994.

-----, "China Receives first of Four Russian Submarines." Arms Control Today. March 1995.

-----, "China Looks Abroad." The Economist. April 29, 1995.

-----, "China Tests Nuclear Bomb." New York Times. May 16, 1995.

-----, "China's Choice." The Economist. April 9, 1994.

-----, "China's New Model Army: Asia." The Economist. June 11, 1994.

-----, "Chinese Nuclear and Conventional Forces: 1993." Arms Control Today. December 1993.

Chiu, Hungdah. "Growth and Role of the Chinese Military." Testimony before the Senate Subcommittee on East Asian and Pacific Affairs, 11 and 12 October 1995.

Cimbala, Stephen J. Ed. The Technology, Strategy, and Politics of SDI. Boulder, Westview Press, 1987.

-----, "Clinton Adjusts China Policy, May Narrow Sanctions." Arms Control Today. December 1993.

-----, "Congress Approves Defense Bill, cuts Back BMD Spending." Arms Control Today. December 1993.

Congress of the United States, Congressional Budget Office. Strategic Defense: Alternative Missions and Their Costs. Washington, D.C., U.S. Government Printing Office 1989.

Covault, Craig. "French \$7.7-Billion Missile to Spark Nuclear Debate." Aviation Week & Space Technology. December 14, 1992.

Covault, Craig. "WEU Seeks European missile Defense Plan." Aviation Week & Space Technology. January 18, 1993.

Crabb, Cecil V. Jr. and Pat M. Holt. Invitation to Struggle: Congress, the President, and Foreign Policy.

Cronin, Patrick M. "Japan's Emergent Security Policy." Joint Force Quarterly. Spring 1995.

Dailey, Brian D. And Patrick J. Parker, Eds. Soviet Strategic Deception. Lexington, Mass, Hoover Institution Press, 1987.

Daoyu, Li. "Foreign Policy and Arms Control: The View from China." Arms Control Today. December 1993.

Davis, Malcolm R. "Ballistic Missiles and Asia-Pacific Security." Asia-Pacific Defense Reporter. March-April 1995.

DeWolf, Howard G. SDI and Arms Control. Fort Lesley J. McNair, Washington, D.C., National Defense University Press, 1989.

Dowler, Thomas W. and Joseph S. Howard III. "Stability in a Proliferated World." Strategic Review. Spring 1995.

Drell, Sidney D., Philip J. Farley, and David Holloway. The Reagan Strategic Defense Initiative: A Technical, Political, and Arms Control Assessment. Stanford, Ca., Center for International Security and Arms Control, Stanford University, 1984.

Durch, William J. The ABM Treaty and Western Security. Cambridge, Mass, Ballinger Publishing Company, 1988.

Durch, William J. "The Future of the ABM Treaty." Adelphi Papers 223. Summer 1987.

Eirinberg, Keith W. "The Growth and Role of the Chinese Military." Testimony before the Senate Foreign Relations Committee Subcommittee on East Asian and Pacific Affairs, 12 October 1995.

Falkenrath, Richard A. "Theater Missile Defence and the Anti-ballistic Missile Treaty." Survival. Winter 1994-95.

Feinstein, Lee. "Big five Accomplish Little During Washington Talks." Arms Control Today. March 1992.

Flax, Alexander. "Implications of Defenses Against Tactical Ballistic Missiles." Arms Control Today. May 1994.

Flexner, James T. Washington: The Indispensable Man. Boston, Mass, Little, Brown and Company, 1974.

-----, "Fourth Review of ABM Treaty Held in Geneva." Arms Control Today. December 1993.

Garfinkle, Adam. "ABM Treaty Failed to Cool Arms Race." New York Times. October 28, 1994.

Gertz, Bill. "Best U.S. Offer on Missile Defense Must Fly on Hill: Talks with Russia at Loggerheads." The Washington Times. February 28, 1995.

Gertz, Bill. "Clinton, Yeltsin Agree on Missiles: Critics Call Statement Backward Step." The Washington Times. May 11, 1995.

Gertz, Bill. "GOP Senate Group Slams Clinton Aide on Arms Pact." The Washington Times. March 7, 1995.

Gertz, Bill. "13 GOP Senators Vow to Prevent New Limits on Missile Defenses." The Washington Post. October 3, 1995.

Godwin, Paul H.B. and John J. Schulz. "Arming the Dragon for the 21st Century: China's Defense Modernization Program." Arms Control Today. December 1993.

Godwin, Paul H.B. and John J. Schulz. "China and Arms Control: Transition in East Asia." Arms Control Today. November 1994.

Goldmuntz, Lawrence. "Multilateral Madness." National Review. August 15, 1994.

Graham, Daniel O. "Q: Should the U.S. Build a Space-Based Missile Defense? Yes: Only a space-Borne System Can Counter Missile Threats." Insight. September 11, 1995.

Graybeal, Sidney N. Testimony Before the Senate Armed Services Committee on Effective Theater Missiles Defense and the ABM Treaty. 4 May 1995.

Graybeal, Sidney N. And Patricia A. McFate. "More Light on the ABM Treaty: Newly Declassified Key Documents." Arms Control Today. March 1993.

Greenwood, Ted. Making of the MIRV: A Study of Defense Decision Making. Cambridge, Mass, Ballinger Publishing Company, 1975.

Gronlund, Lisbeth, George Lewis, Theodore Postol and David Wright. "Highly Capable Theater Missile Defense and the ABM Treaty." Arms Control Today. April 1994.

Harrison, Selig S. "The North Korean Nuclear Crisis: From Stalemate to Breakthrough." Arms Control Today. November 1994.

Harvey, John R. And Uzi Rubin. "Controlling Ballistic Missiles: How Important? How to do it.?" Arms Control Today. March 1992.

Hersh, Seymour M. "Missile Wars." The New Yorker. September 26, 1994.

Hildreth, Steven A. The ABM Treaty and Theater Missile Defense: Proposed Changes and Potential Implications. Washington, D.C. Congressional Research Service, Library of Congress, 1994.

Hildreth, Steven A. Theater Missile Defense: Issues for the 104th Congress. Washington, D.C. Congressional research Service, Library of Congress, 1995.

Holman, Barry W. "The Future of SDI: A Framework of Decision Making." Essays on Strategy VI. 1989.

Holloway, Nigel. "Pandora's Box: U.S. Faces Up-hill task Securing Nuclear Treaty Renewal." Far Eastern Economic Review. April 20, 1995.

Holum, John D. "Back to the Arms Race? Don't Put Allies at Risk." New York Times. October 25, 1994.

Hughes, David. "Congress Questions THAAD Cost Increase." Aviation Week & space Technology. September 26, 1994.

Hughes, David. "THAAD Exceeds Budget as Army Rethinks Testing." Aviation Week & Space Technology. August 22, 1994.

Hughes, Robert C. SDI: A View from Europe. Washington,, D.C., National Defense University Press, 1990.

-----, Implications of the President's Strategic Defense Initiative and Anti-satellite Weapons Policy: hearings Before the Subcommittee on Arms Control, International Security and Science of the Committee on Foreign Affairs House of Representatives. Washington, D.C., U.S. Government Printing Office, 1985.

-----, "Is Russia Slowing Down in Arms Race?" An interview with Robert S. McNamara. U.S. News & World Report. April 12, 1965.

Kaye, Lincoln. "Reduce Speed Ahead." Far Eastern Economic Review. March 16, 1995.

Kaye, Lincoln. "The Mantle Slips." Far Eastern Economic Review. March 2, 1995.

Keeny, Spurgeon M. "A Triumph of Quiet Diplomacy." Arms Control Today. November 1994.

Keeny, Spurgeon M. "Inventing an Enemy." New York Times. June 18, 1994.

Keeny, Spurgeon M. "The Theater Missile Defense Threat to U.S. Security." Arms Control Today. September 1994.

Kirby, David P. "Strategic Defense and Security." Essays on Strategy V. 1988.

Kissinger, Henry. White House Years. Boston, Mass, Little, Brown and Company, 1979.

Kissinger, Henry. "Letter to the Chairman of the Senate Armed Services Committee." Inside the Army. August 14, 1995.

Koo Cha, Young and Kang Choi. "South Korea's Defense Posture." Joint Force Quarterly. Spring 1995.

-----, Letter from Senate Republicans to President Clinton concerning SCC Negotiations on Demarcation Between Strategic and Tactical and/or Theater Ballistic Missiles, January 4, 1995.

-----, Letter from Senate Republicans to President Clinton concerning SCC Negotiations on Demarcation Between Strategic and Tactical and/or Theater Ballistic Missiles, January 17, 1995.

-----, Letter from Senate Republicans to President Clinton concerning SCC Negotiations on Demarcation Between Strategic and Tactical and/or Theater Ballistic Missiles, March 25, 1995.

-----, Letter from Senate Republicans to President Clinton concerning SCC Negotiations on Demarcation Between Strategic and Tactical and/or Theater Ballistic Missiles, March 31, 1995.

Lin, Herbert. New Weapon Technologies & the ABM Treaty. McLean, Va, Pergamon-Brassey's International Defense Publishers, 1988.

-----, Livre Blanc sur la Defence 1994. Paris, France, 1994.

Lockwood, Dunbar. "France Announces Testing Halt; Congress Debates Similar Measure." Arms Control Today. April 1992.

Lockwood, Dunbar. "The Status of U.S., Russian and Chinese Nuclear Forces in Northeast Asia." Arms Control Today. November 1994.

Lok, Joris J. "USN Prepares 'Make or Break' LEAP tests." Jane's Defense Weekly. 23 April 1994.

Macke, Richard C. "A Commander-in-Chief Looks at East Asia." Joint Force Quarterly. Spring 1995.

Makhijani, Arjun. "Open the Files Please: Japanese Government Rhetoric About its 'Nuclear Allergy' is not Entirely Persuasive; its Time to Clear the Air." Bulletin of the Atomic Scientists. January-February 1995.

Malik, J Mohan. "China's Unprincipled Stand on Nuclear Disarmament." Pacific Research. November 4, 1994.

Mann, Jim. "U.S. starting to View China as Potential Enemy." Los Angeles Times. April 16, 1995.

Mansfield, Edward D. and Jack Snyder. "Democratization and War." Foreign Affairs. May/June 1995.

Mark, Hans. "The Only Superpower." Vital Speeches of the Day. March 1, 1992.

Matsusaki, Hajime and Brian Y. Shiroyama. "Japanese Military Burden sharing." Essays on Strategy VI. 1989.

Mendelsohn, Jack. "New Threats to the NPT and the ABM Treaty." Arms Control Today. April 1994.

Mendelsohn, Jack and John B. Rhinelander. "Shooting Down the ABM Treaty." Arms Control Today. September 1994.

Miller, Steve E. and Stephen Van Evera. The Star Wars Controversy. Princeton, N.J., Princeton University Press, 1986.

Montaperto, Ronald N. "The PLA: In Search of a Strategic Focus." Joint Force Quarterly. Spring 1995.

-----, "Moscow-Peking Rupture - Its Meaning to the U.S." U.S. News & World Report. March 17, 1969.

Mosher, David and Raymond Hall. "The Clinton Plan for Theater Missile Defenses: Costs and Alternatives." Arms Control Today. September 1994.

Munro, Ross H. "China's Relative Power." Testimony before the Senate Subcommittee on East Asian and Pacific Affairs on the "Chinese Military: its Role and Growth." 12 October 1995.

-----, National Military Strategy of the United States of America. Washington, D.C., U.S. Government Printing Office, 1995.

-----, "New Nuclear Posture Review Shows Little Change in Policies." Arms Control Today. November 1994.

Nixon, Richard M. The Memoirs of Richard Nixon. New York, N.Y., Grosset and Dunlap Publishing Company, 1978.

-----, "No Change Yet: French Defence." The Economist. February 19, 1994.

Okonogi, Masao. "Assessing the U.S.-North Korea Agreement." Joint Force Quarterly. Spring 1995.

O'Neill, Malcolm R. "Statement before the Committee on Armed Services, United States Senate, May 4, 1995." Washington, D.C., Office of External Affairs, Ballistic Missile Defense Organization.

O'Neill, Malcolm R. "The U.S. Theater Missile Defence Programme." Defense and Security Review. 1995.

Opall, Barbara. "China Sinks U.S. in Simulated War." Defense News. January 30 - February 5 1995.

Opall, Barbara. "Officials Clash Over Proposal for U.S.-China War games." Defense News. January 30 - February 5 1995.

Payne, Keith B. "Ballistic Missile Proliferation - An Audit." Jane's Intelligence Review Yearbook. 1995.

Pendley, William T. "America and the Asia-Pacific Region." Joint Force Quarterly. Spring 1995.

-----, "Pentagon begins Policy review of Post-Cold War Nuclear Strategy." Arms Control Today. December 1993.

Pike, John and Marcus Corbin. "Taking Aim at the ABM Treaty." Arms Control Today. May 1995.

Pike, John. "Theater Missile Defense Programs: Status and Prospects." Arms Control Today. September 1994.

Pollack, Jonathan D. "Sources of Instability and Conflict in Northeast Asia." Arms Control Today. November 1994.

Quester, George. The Future of Nuclear Deterrence. Lexington, Mass, D.C. Heath and Company Publishers, 1986.

-----, Restructuring of the Strategic Defense Initiative (SDI) Program: Joint Hearing before the Committee on Armed Services United States Senate and the Committee on Armed Services House of Representatives. Washington, D.C., U.S. government Printing Office, 1988.

Ritcheson, Philip L. "Proliferation and the Challenge to Deterrence." Strategic Review. Spring 1995.

Roberts, Guy B. "An Elegant Irrelevance: The Anti-Ballistic Missile Treaty in the New World Disorder." Strategic Review. Spring 1995.

Savage, William E. "Strategy Implications of SDI." Essays on strategy V. 1987.

Schulz, John J. "Perspectives on the Dragon: Views on the PLA as it Arms for the 21st Century." Testimony at Hearings on the People's Liberation Army before the Subcommittee on East Asian and Pacific Affairs of the Senate Foreign Relations Committee, 12 October 1995.

-----, SDI Program: Hearings before the Defense Policy Panel and Research and Development Subcommittee of the Committee on Armed Services House of Representatives. Washington, D.C., U.S. Government Printing Office, 1988.

-----, "Senators Hear Testimony Against Changes to the ABM Treaty." Arms Control Today. June 1994.

Shen, Dingli. "Toward a Nuclear-Weapons-Free world: A Chinese Perspective." Bulletin of the Atomic Scientists. March-April 1994.

Shen, Dingli. "Toward Early Cessation of Nuclear Weapons Testing." Pacific Research. November 4, 1994.

Shenon, Philip. "Manila Sees Threat from China Over Reef in South China Sea." New York Times. February 19, 1995.

Shoemaker, Christopher C. "Reviving Flexible Response." Essays on Strategy VII. 1990.

Simon, Jeffrey ed. Security Implications of SDI. Fort Lesley J. McNair, Washington, D.C., National Defense university Press, 1990.

Smith, Gerard C. "Two Decades Later: The ABM Treaty in a Changed World." Arms Control Today. May 1992.

Smith, Richard N. Patriarch: George Washington and the New American Nation. Boston, Mass, Houghton Mifflin Company, 1993.

Spring, Baker. "Removing the ABM Treaty Obstacle to U.S. and Soviet Defenses Against Missiles." The Heritage Foundation Backgrounder No. 867. Washington, D.C., The Heritage Foundation, 1991.

-----, Statement on the Defence Estimates 1995: Stable Forces in a Strong Britain. London, England, Her Majesty's Stationary Office, 1995.

Stockton, Paul. "Strategic Stability Between the Superpowers." Adelphi Papers 213. Winter 1986.

Suter, Keith. "French Nuclear Testing in the South Pacific." Contemporary Review. September 1992.

-----, "Testing, Testing: France." The Economist. April 11, 1992.

-----, The ABM Treaty and the Constitution: Joint Hearings before the Committee on Foreign Relations and the Committee on the Judiciary United States Senate. Washington, D.C., U.S. government Printing Office, 1987.

-----, "The Price of Independent France." The Economist. October 16, 1993.

-----, "The Proliferation of ballistic Missiles." Arms Control Today. April 1992.

-----, The SDI as it Relates to the ABM Treaty: Hearings before the Committee on Foreign Relations United States Senate. Washington, D.C., U.S. Government Printing Office, 1991.

-----, "The U.S. and China: Curbing Missile and Nuclear Weapons." U.S. Department of State Dispatch. October 17, 1994.

Thomas, Vincent C. "A Legacy of Readiness: An Interview with Secretary of Defense William J. Perry." Sea Power. October 1995.

-----, Treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems. Signed at Moscow May 26, 1972. Ratified by U.S. President September 30, 1972.

Tunick, Wayne. "Protecting Deployed Forces." Proceedings. April 1995.

Tyler, Patrick E. "China Upgrades Nuclear Arsenal as it Re-examines Guns vs. Butter." New York Times. October 26, 1994.

Tyler, Patrick E. "China warns Against 'Star wars' Shield for U.S. Forces in Asia." New York Times. February 18, 1995.

-----, "U.S. Drops CTB 'early Out' Plan; Test Moratorium May be Permanent." Arms Control Today. March 1995.

United States General Accounting Office. Fact Sheet for the Chairman, Committee on Armed Services, House of representatives. "Strategic Defense Initiative: 15-Year Funding Requirements." Washington, D.C., U.S. government Printing Office, 1992.

United States General Accounting Office. Report tot he Chairman, Legislation and national Security Subcommittee, Committee on Government Operations, House of Representatives. "Strategic Defense Initiative: Changing Design and Technological Uncertainties Create Significant Risk." Washington, D.C., U.S. Government Printing Office, 1992.

-----, United States Security Strategy for the East Asia-Pacific Region. Washington, D.C., U.S. government Printing Office, 1995.

Voas, Jeannette. "Soviet Attitudes Towards BMD and the ABM Treaty." Adelphi Papers 255. Winter 1990.

Waldron, Arthur. "Role of the Chinese military and its Implications for the Future of Asia and the U.S." Testimony before the Senate Subcommittee on East Asian and Pacific Affairs of the Senate Foreign Relations Committee, 12 October 1995.

Weinberger, Caspar W. "How to Make Our Defense-lessness Permanent." Forbes. October 24, 1994.

White, Gerard. Prepared Statement before the Subcommittee on East Asian and Pacific Affairs of the Committee on Foreign Relations, United States Senate, 12 October 1995.

-----, White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr. Federal Ministry of Defense, Bonn, Germany.

-----, "Who will Bind France.? The Economist. April 29, 1995.

Wilhelm, Alfred D. Jr. "China and the Region: Facing a Decade of Challenges." Arms Control Today. December 1993.

Witney, Nicholas K. J. "British Nuclear Policy After the Cold War." Survival. Winter 1994-95.

Wolfsthal, Jon B. "U.S., China Reach New Accords on MTCR, Fissile Cutoff Issues." Arms Control Today. November 1994.

Worden, Simon P. SDI and the Alternatives. Fort Lesley J. McNair, Washington, D.C., National Defense University Press, 1991.

Wright, David and Timur Kadyshev. "The North Korean Missile Program: How Advanced is it?" Arms Control Today. April 1994.

Yost, David S. "Ballistic Missile Defense and the Atlantic Alliance." International Security. Fall 1982.

Yost, David S. "European Anxieties about Ballistic Missile Defense." Washington Quarterly. Fall 1984.

Yost, David S. Lecture on France in Seminar on Comparative Strategic Cultures, Naval Postgraduate School, Fall 1995.

Yost, David S. "Nuclear Weapons Issues in France." Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China. San Diego, Ca, Institute on Global Conflict and Cooperation, University of San Diego, 1994.

Yost, David S. "Nuclear Debates in France." Survival. Winter 1994-95.

Yost, David S. Soviet Ballistic Missile Defense and the Western Alliance. Cambridge, Mass, Harvard University Press, 1988.

Yost, David S. "France," in Fen Hampson, Harold von Riekhoff, and John Roper, eds., The Allies and Arms Control. Baltimore, Md, Johns Hopkins University Press, 1992.

Yost, David S. "The Reykjavik Summit and European Security." SAIS Review vol 7., Summer-Fall 1987.

Yost, David S. "Western Europe and the U.S. Strategic Defense Initiative." Journal of International Affairs, Summer 1988.

INITIAL DISTRIBUTION LIST

- | | |
|---|---|
| 1. Defense Technical Information Center
8725 John J. Kingman Rd., STE 0944
Ft. Belvoir, Va 22060-6218 | 2 |
| 2. Library, Code 13
Naval Postgraduate School
Monterey, Ca 93943-5101 | 2 |
| 3. Rear Adm. Marsha J. Evans
Superintendent, Naval Postgraduate School (Code 00)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 4. Dr. Frank M. Teti
Chairman, National Security Affairs (NS/TE)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 5. Dr. James Wirtz (NS/WZ)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 6. Dr. David Yost (NS/YO)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 7. Dr. Cindy Levy (NS/LC)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 8. Dr. Claude Buss (NS/BX)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 9. Dr. Bert Patenaude (NS/PA)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |

- | | |
|--|---|
| 10. Capt. W. M. Dunaway, USN (NS/DU)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 11. Dr. Maria Moyano (NS/MM)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 12. Cdr. R. Mitchell Brown, USN (Ret) (NS/BR)
Naval Postgraduate School
Monterey, Ca 93943-5101 | 1 |
| 13. Lt. James R. Greenburg, USN
108 Brownell Circle
Monterey, Ca 93940-5002 | 2 |
| 14. Warren M. Christopher
Secretary of State
2201 C Street NW
Washington, D.C. 20520 | 1 |
| 15. Dr. William Perry
Secretary of Defense
7100 Defense Pentagon
Washington, D.C. 20301-7100 | 1 |
| 16. John White
Deputy Secretary of Defense
7100 Defense Pentagon
Washington, D.C. 20301-7100 | 1 |
| 17. Anthony Lake
National Security Advisor
1600 Pennsylvania Avenue NW
Washington, D.C. 20500 | 1 |
| 18. Senator Strom Thurmond (R. SC)
217 Russell
United States Senate
Washington, D.C. 20510 | 1 |

- | | |
|---|---|
| 19. Senator John Chaffee (R. RI)
506 Dirksen
United States Senate
Washington, D.C. 20510 | 1 |
| 20. Senator Sam Nunn (D. GA)
303 Dirksen
United States Senate
Washington, D.C. 20510 | 1 |
| 21. Senator Dale Bumpers (D. AR)
229 Dirksen
United States Senate
Washington, D.C. 20510 | 1 |
| 22. Gen. John M. Shalikashvili
Chairman of the Joint Chiefs of Staff
7100 Defense Pentagon
Washington, D.C. 20301-7100 | 1 |
| 23. Adm. J. M. Boorda
Chief of Naval Operations
7100 Defense Pentagon
Washington, D.C. 20301-7100 | 1 |
| 24. Lt. Col. Jeffrey A. Larsen, USAF
Institute for National Security Studies
HQ USAFA/DFE
2354 Fairchild Dr., Suite 4K25
U.S. Air Force Academy, Colorado Springs, Co 80840 | 1 |
| 25. Lt. Col David Barrett, USAF (J-5/CAC)
Room 2E-1001
7100 Defense Pentagon
Washington, D.C. 20301-7100 | 1 |
| 26. COMUSSTRATCOM
J-512 Suite 2E-18
Attn: Maj. Daniel Ciechanowski, USAF
901 SAC Blvd
Offutt AFB, Nebraska 68113-6500 | 1 |

27. Maj. Dennis Ward, USAF 1
Ballistic Missile Defense Organization
Rm 1E-1020
7100 Defense Pentagon
Washington, D.C. 20301-7100
28. Dr. Donald Baucom (SR/Hist) 1
Ballistic Missile Defense Organization
7100 Defense Pentagon
Washington, D.C. 20301-7100
29. Dr. Robert Soofer 1
Ballistic Missile Defense Organization
7100 Defense Pentagon
Washington, D.C. 20301-7100
30. Mr. George P. Shultz 1
Hoover Institution
On War, Revolution and Peace
Stanford University
Stanford, Ca 94305-6010
31. Amb. Sidney Graybeal 1
Science Applications International Corp.
1710 Goodridge Dr
McLean, Va 22102
32. Dr. Keith Payne 1
National Institute for Public Policy
3031 Javier
Fairfax, Va 22102
33. Dr. Jacob Kipp 1
Foreign Military Studies Office
604 Lowe Dr
Fort Leavenworth, KS 66027-2322
34. Dr. Mark Albrecht 1
VP for Governmental Affairs
Science Applications International Corp
1710 Goodridge Dr
McLean, Va 22101

- | | |
|---|---|
| 35. Dr. Robert L. Rau
Political Science Department
39 Nimitz Library
U.S. Naval Academy
Annapolis, MD 21402 | 1 |
| 36. George D. Haimbaugh, Jr.
National Institute of Justice Advisory Board
University of South Carolina
School of Law
Columbia, SC 29208 | 1 |
| 37. Dr. David G. Wiencek
International Security Consultant
3293C Sutton Place, NW
Washington, D.C. 20016 | 1 |